

Restriction enzymes and their isoschizomers

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INTRODUCTION

Since the last compilation of restriction enzymes (1), 261 new entries have been added including 16 new specificities. With the growing size of this database and the recognition that the most widespread use of the information is as a database for computer programs predicting restriction enzyme cleavage patterns, the new format has been continued. This format is intended to contain the minimal amount of information required by a computer program. It should be noted that only enzymes for which the recognition sequence is known are included. This new list is shown in the first Table, while an alphabetical listing of all Type II enzymes, including those of unknown recognition sequence, is presented in the second Table. A copy of the restriction enzyme database in its previous format (2), including enzymes of unknown recognition sequence, will be available upon request. It should also be noted that an alternative compilation of these enzymes has recently been produced (3).

The database shown in these Tables is available, in a form that is easily reformatted, online through the GENBANK computer resource. It is also possible to get regular monthly updates, or specialized versions of the database by electronic mail. For instance, a file containing the database in a format that can be used directly by the UWGCG computer software package is available. Files to support other packages are either available or in preparation. Enquiries should be directed to roberts@cshlab.bitnet.

In forming this list, all endonucleases cleaving DNA at a specific sequence have been considered to be restriction enzymes, although in most cases there is no direct genetic evidence for the presence of a restriction-modification system. The endonucleases are named in accordance with the proposal of Smith and Nathans (4).

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Type I enzymes

Enzyme	Recognition sequence	Me site ³	Reference
<i>CfrAI</i>	GCANNNNNNNNGTGG		616,617
<i>EcoAI</i>	GAGNNNNNNNGTCA	2(6) -3(6)	618,619
<i>EcoBI</i>	TGANNNNNNNTGCT	3(6) -4(6)	620-624
<i>EcoDI</i>	TTANNNNNNNGTCY		625
<i>EcoDXXI</i>	TCANNNNNNNATTG		626,627
<i>EcoEI</i>	GAGNNNNNNNATGC		628,629
<i>EcoKI</i>	AACNNNNNNGTGC	2(6) -3(6)	630-633
<i>EcoR124I</i>	GAANNNNNNRTCG		634
<i>EcoR124/3I</i>	GAANNNNNNRTCG	-3(6)	634
<i>StySBI</i>	GAGNNNNNNRTAYG	2(6) -4(6)	635
<i>StySJI</i>	GAGNNNNNNNGTRC		636
<i>StySPI</i>	AACNNNNNNNGTRC	2(6) -3(6)	635
<i>StySQI</i>	AACNNNNNNRTAYG		637

Type II enzymes

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
<i>AatII</i>		GACGTIC		EGMNOPRSUVX	5
<i>AccI</i>		GT ¹ MKAC		ABEGIKMNOPRSUVX	6
	<i>DsaVI</i>	GTMKAC			7
	<i>FblI</i>	GT ¹ MKAC			8
<i>AcyI</i>		GR ¹ CGYC		EMRV	9
	<i>AhaII</i>	GR ¹ CGYC		GN	10
	<i>AosII</i>	GR ¹ CGYC			11
	<i>AstWI</i>	GR ¹ CGYC			12
	<i>AsuIII</i>	GR ¹ CGYC			12
	<i>BbvII</i>	GR ¹ CGYC		AK	13
	<i>HgiI</i>	GR ¹ CGYC			14
	<i>HgiDI</i>	GR ¹ CGYC			15
	<i>HgiGI</i>	GR ¹ CGYC			15
	<i>HgiHII</i>	GR ¹ CGYC			16
	<i>HinII</i>	GR ¹ CGYC		OU	17
	<i>Hin8I</i>	GRCGYC			18
	<i>NlaSII</i>	GRCGYC			19
	<i>SspJII</i>	GRCGYC			20
	<i>SspM1II</i>	GRCGYC			20
	<i>SspM2II</i>	GRCGYC			20
<i>AflII</i>		C ¹ TTAAG		AGKNU	21
	<i>Esp4I</i>	C ¹ TTAAG			22
	<i>Vha464I</i>	C ¹ TTAAG			8
<i>AflIII</i>		A ¹ CRYGT		GMU	21
<i>AgeI</i>		A ¹ CCGGT			23
<i>AhaIII</i>		TTT ¹ AAA		E	24
<i>AluI</i>		TTT ¹ AAA		ABEGIKMNOPRSUVX	25
	<i>DraI</i>	AG ¹ CT	3(5)	ABEGIKMNOPRSUVX	26-29
	<i>MtlI</i>	AG ¹ CT			30,31
	<i>OriI</i>	AGCT			32
	<i>OruNI</i>	AGCT			33
	<i>Oxal</i>	AGCT			34
<i>AlwNI</i>		CAGNNN ¹ CTG		N	35
<i>Apal</i>		GGGCC ¹ C	4(5)	BEGIKMNOPRUVX	36,37
	<i>Bsp120I</i>	G ¹ GGCCC			38
	<i>EciEI</i>	GGGCC			39
<i>ApalI</i>		G ¹ TGCAC		AEGKNX	40
	<i>Alw44I</i>	G ¹ TGCAC		O	41
	<i>Amel</i>	GTGCAC			32
	<i>SnoI</i>	G ¹ TGCAC		MV	42,43
	<i>VneI</i>	G ¹ TGCAC			44

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
<i>Asu</i> I		G1GNCC		R	45
	<i>Aha</i> BII	G1GNCC			8
	<i>Apu</i> I	GGNCC			46
	<i>Bac</i> 36I	G1GNCC			46
	<i>Bal</i> 228I	G1GNCC			14
	<i>Bav</i> AII	G1GNCC			47
	<i>Bce</i> 22I	G1GNCC			8
	<i>Bsh</i> KI	G1GNCC			48
	<i>Bsp</i> BII	G1GNCC			49
	<i>Cfr</i> 4I	GGNCC			50,51
	<i>Cfr</i> 8I	GGNCC			50,51
	<i>Cfr</i> 13I	G1GNCC	4(5)	AKOU	50,52
	<i>Cfr</i> 23I	GGNCC			53
	<i>Cfr</i> 33I	GGNCC			54
	<i>Cfr</i> 45I	GGNCC			54
	<i>Cfr</i> 46I	GGNCC			54
	<i>Cfr</i> 47I	GGNCC			54
	<i>Cfr</i> 52I	GGNCC			55
	<i>Cfr</i> 54I	GGNCC			56
	<i>Cfr</i> NI	GGNCC			57
	<i>Eco</i> 39I	GGNCC			58
	<i>Eco</i> 47II	GGNCC			59
	<i>Eco</i> 196II	GGNCC			60
	<i>Eco</i> 201I	GGNCC			60
	<i>Gse</i> I	GGNCC			61
	<i>Hin</i> 5II	GGNCC			18
	<i>Mja</i> I	GGNCC			62
	<i>Msp</i> 24I	GGNCC			8
	<i>Mth</i> TI	GGNCC			63
	<i>Nla</i> DII	GGNCC			64
	<i>Nmu</i> EII	GGNCC			65
	<i>Nmu</i> SI	GGNCC			66
	<i>Nsp</i> IV	G1GNCC			67
	<i>Nsp</i> LII	GGNCC			68,69
	<i>Pde</i> 12I	G1GNCC			8
	<i>Pse</i> I	GGNCC			70
	<i>Psp</i> I	GGNCC			71
	<i>Sau</i> 96I	G1GNCC			72
	<i>Sau</i> BI	GGNCC			73
	<i>Sdy</i> I	GGNCC			74
<i>Asu</i> II		TT1CGAA		G	12,75
	<i>Aca</i> I	TTCGAA			76,77
	<i>Av</i> I	TTCGAA			70
	<i>Bim</i> 19I	TT1CGAA			8
	<i>Bpu</i> 14I	TT1CGAA			8
	<i>Bsi</i> CI	TTCGAA			78
	<i>Bsp</i> 82I	TTCGAA			79
	<i>Bsp</i> 119I	TTCGAA			55
	<i>Bst</i> BI	TT1CGAA		N	80,81
	<i>Csp</i> 45I	TT1CGAA		R	82
	<i>Fsp</i> II	TT1CGAA			83
	<i>Lsp</i> I	TT1CGAA		V	42,43
	<i>Mla</i> I	TT1CGAA			84
	<i>Nsp</i> V	TTCGAA		AKOPU	67
	<i>Nsp</i> BI	TTCGAA			85
	<i>Nsp</i> FI	TTCGAA			61
	<i>Nsp</i> JI	TTCGAA			69,77
	<i>Sfi</i> I	TT1CGAA		M	86
	<i>Sgr</i> 1839I	TTCGAA			87
	<i>Ssp</i> II	TT1CGAA			88
	<i>Ssp</i> 152I	TTCGAA			87
<i>Ava</i> I		C1YCGRG		ABEGIKMNOPRSUVX	89,90
	<i>Acr</i> I	CYCGRG			77
	<i>Ama</i> 87I	C1YCGRG			8

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
<i>AquI</i>		C ¹ YCGRG	1(5)		91,92
<i>AspBI</i>		CYCGRG			85
<i>AspCI</i>		CYCGRG			85
<i>AspDI</i>		CYCGRG			85
<i>AvrI</i>		CYCGRG			93
<i>BcoI</i>		C ¹ YCGRG			94
<i>BstSI</i>		C ¹ YCGRG			80
<i>Eco88I</i>		CYCGRG			95
<i>NllI</i>		CYCGRG			85
<i>NmuAI</i>		CYCGRG			85
<i>NspIII</i>		C ¹ YCGRG		PV	67
<i>NspDI</i>		CYCGRG			85
<i>NspEI</i>		CYCGRG			96
<i>NspSAI</i>		C ¹ YCGRG			97
<i>Avall</i>		G ¹ GWCC		ABEGIKMNPRSVX	89,90,98,99
<i>AflI</i>		G ¹ GWCC			21
<i>Asp697I</i>		GGWCC			100
<i>Asp745I</i>		G ¹ GWCC			14
<i>AspBII</i>		GGWCC			85
<i>AspCII</i>		GGWCC			85
<i>AspDII</i>		GGWCC			85
<i>BamNxI</i>		G ¹ GWCC			101–103
<i>Bme18I</i>		G ¹ GWCC			104
<i>Bme216I</i>		G ¹ GWCC			105,106
<i>Bsp100I</i>		GGWCC			38
<i>BspJ105I</i>		GGWCC			107
<i>BtlI</i>		GGWCC			108
<i>CauI</i>		G ¹ GWCC			109,110
<i>CllI</i>		GGWCC			68
<i>ClmII</i>		GGWCC			111
<i>DsalIV</i>		G ¹ GWCC			7
<i>EagMI</i>		G ¹ GWCC			112,113
<i>Eco47I</i>		G ¹ GWCC			59,114
<i>ErpI</i>		G ¹ GWCC		OU	46
<i>FdlI</i>		G ¹ GWCC			115,116
<i>FspMSI</i>		G ¹ GWCC			46
<i>GspAI</i>		GGWCC			78
<i>HgiBI</i>		G ¹ GWCC			15
<i>HgiCII</i>		G ¹ GWCC			15
<i>HgiEI</i>		G ¹ GWCC			15
<i>HgiHIII</i>		G ¹ GWCC			16
<i>HgiJII</i>		G ¹ GWCC			16
<i>Hsp2I</i>		GGWCC			55
<i>Kzo49I</i>		G ¹ GWCC			8
<i>Mfol</i>		GGWCC			117
<i>MblI</i>		GGWCC			118
<i>MspAI</i>		GGWCC			117
<i>NllII</i>		GGWCC			85
<i>NmuAII</i>		GGWCC			85
<i>NspDII</i>		GGWCC			85
<i>NspGI</i>		GGWCC			69,77
<i>NspHIII</i>		GGWCC			85
<i>NspKI</i>		GGWCC			68,69
<i>SfiI</i>		GGWCC			119
<i>Sgh1835I</i>		GGWCC			87
<i>SinI</i>		G ¹ GWCC	4(5)	RSV	70,120,121
<i>SinAI</i>		GGWCC			122
<i>SinBI</i>		GGWCC			122
<i>SinCI</i>		GGWCC			122
<i>SinDI</i>		GGWCC			122
<i>SinEI</i>		GGWCC			122
<i>SinFI</i>		GGWCC			122
<i>SinGI</i>		GGWCC			122
<i>SinHI</i>		GGWCC			122

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
<i>Ava</i> III	<i>Sin</i> JI	GGGCC			122
	<i>Tru</i> I	GGGCC			123
		ATGCAT	G		124,125
	<i>Eco</i> T22I	ATGCA ¹ T	KOU		126
	<i>Nsi</i> I	ATGCA ¹ T	BEMNRVX		127
	<i>Uba</i> 1103I	ATGCA ¹ T			128
	<i>Zsp</i> 2I	ATGCA ¹ T			8
		C ¹ CTAGG	N		93,129
		TGG ¹ CCA	4(5)	ABEGIKNRSVX	37,130
	<i>Msc</i> I	TGG ¹ CCA	N		32,131
<i>Avr</i> II	<i>Msp</i> 20I	TGG ¹ CCA			8
		G ¹ GATCC	5(4)	ABEGIKMNPORSUVX	132–135
	<i>Aac</i> I	GGATCC			136
	<i>Aae</i> I	GGATCC			136
	<i>Aca</i> II	GGATCC			77
	<i>Acc</i> EBI	G ¹ GATCC			137
	<i>Ain</i> II	GGATCC			77
	<i>Ali</i> I	G ¹ GATCC			138
	<i>Ali</i> 12257I	GGATCC			139
	<i>Ali</i> 12258I	GGATCC			139
<i>Bam</i> HI	<i>Asp</i> TII	GGATCC			77
	<i>Bam</i> FII	GGATCC			140
	<i>Bam</i> KI	GGATCC			140
	<i>Bam</i> NI	GGATCC			102
	<i>Bca</i> 1259I	GGATCC			87
	<i>Bce</i> 751I	G ¹ GATCC			141
	<i>Bco</i> 10278I	GGATCC			142
	<i>Bna</i> I	G ¹ GATCC	5(5)		143,144
	<i>Bsp</i> 30I	GGATCC			38
	<i>Bsp</i> 46I	GGATCC			79
<i>Bst</i>	<i>Bsp</i> 98I	GGATCC			38
	<i>Bst</i> I	G ¹ GATCC	GPV		145,146
	<i>Bst</i> 126I	GGATCC			87
	<i>Bst</i> 2464I	GGATCC			87
	<i>Bst</i> 2902I	GGATCC			87
	<i>Bst</i> QI	GGATCC			80
	<i>Bsu</i> 90I	GG ¹ ATCC			141
	<i>Bsu</i> 8565I	GGATCC			142
	<i>Bsu</i> 8646I	GGATCC			142
	<i>Cell</i>	GGATCC			77
<i>Dde</i> I	<i>Dds</i> I	GGATCC			147
	<i>Gdo</i> I	GGATCC			136
	<i>Gin</i> I	GGATCC			148
	<i>Gox</i> I	GGATCC			136
	<i>Gse</i> III	GGATCC			61
	<i>Mle</i> I	GGATCC			30
	<i>Mlu</i> 23I	G ¹ GATCC			8
	<i>Nas</i> BI	GGATCC			30
	<i>Nsp</i> SAIV	G ¹ GATCC			97
	<i>Pae</i> 177I	GGATCC			60
<i>Bbv</i> I	<i>Rhs</i> I	GGATCC			149
	<i>Rlu</i> 4I	GGATCC			150
	<i>Sur</i> 2I	G ¹ GATCC			8
	<i>Uba</i> 1110I	GGATCC			151
		GCAGC(8/12)	2(5), –2(5)	EGINX	134,152–154
	<i>Alw</i> XI	GCAGC(8/12)			155
	<i>Bsp</i> 423I	GCAGC			156
	<i>Uba</i> 1109I	GCAGC			157
		GAAGAC(2/6)			158
					159
<i>Bbv</i> II	<i>Bbs</i> I	GAAGAC			8
	<i>Bbv</i> 16I	GAAGAC(2/6)			156
	<i>Bsp</i> VI	GAAGAC			160
		ACGGC(12/13)			161
<i>Bce</i> fI		GCANNNNNNTCG			
<i>Bcg</i> f ⁵					

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
<i>BclI</i>		T ¹ GATCA		BEGINMNOPRSUVX	162
	<i>AruCI</i>	TGATCA			163
	<i>BsiQI</i>	TGATCA			78
	<i>BspXII</i>	T ¹ GATCA			164
	<i>BstGI</i>	TGATCA			165
	<i>BstKI</i>	TGATCA			80
	<i>CpeI</i>	TGATCA			166
	<i>CthI</i>	TGATCA			167
	<i>FbaI</i>	TGATCA			119
	<i>Ksp22I</i>	T ¹ GATCA			8
	<i>PovI</i>	TGATCA			112,168
	<i>SseI</i>	TGATCA			61
	<i>SstIV</i>	TGATCA			169
<i>BglI</i>		GCCNNNN!NGGC		BEGINMNOPRSUVX	170–174
	<i>VanI</i>	GCCNNNNNNGGC			175
<i>BglII</i>		A ¹ GATCT		ABEGIKMNOPRSUVX	171,172,176
	<i>NspMACI</i>	A ¹ GATCT			177
<i>BinI</i>		GGATC(4/5)			178
	<i>AlwI</i>	GGATC(4/5)	N		159
	<i>BthII</i>	GGATC			179
<i>Bpu10I</i>		CCTNAGC(–5/–2)			180
<i>BsaAI</i>		YAC ¹ GTR	N		81
	<i>MspYI</i>	YAC ¹ GTR			181
<i>BsaBI</i>		GATNN ¹ NNATC	N		80
	<i>MamI</i>	GATNN ¹ NNATC	M		182
<i>BsePI</i>		GCGCGC			165
	<i>BsoPI</i>	GCGCGC			165
	<i>BsrHI</i>	GCGCGC			165
	<i>BssHII</i>	G ¹ CGCGC		EGMNOUVX	165,183
	<i>Eco143I</i>	GCGCGC			150
	<i>Esp7I</i>	GCGCGC			79
	<i>Esp8I</i>	GCGCGC			79
	<i>Kpn30I</i>	GCGCGC			184
<i>BstI</i>		CTCGTG(–5/–1)			185
<i>BsmI</i>		GAATGC(1/–1)		EGNOUVX	75
<i>BsmAI</i>		GTCTC(1/5)	N		
	<i>Alw26I</i>	GTCTC(1/5)			186
<i>BspCI</i>		GCNN ¹ NNGC			156
<i>BspGI</i>		CTGGAC			156
<i>BspHI</i>		T ¹ CATGA	N		187
	<i>RspXI</i>	T ¹ CATGA	G		188
<i>BspMI</i>		ACCTGC(4/8)	N		159,189
<i>BspMII</i>		T ¹ CCGGA	N		159,189
	<i>AccIII</i>	T ¹ CCGGA		AEGKR	75,190
	<i>Bbf741II</i>	TCCGGA			191
	<i>BbvAIII</i>	T ¹ CCGGA			192
	<i>Bla7920I</i>	TCCGGA			191
	<i>BseAI</i>	T ¹ CCGGA			193
	<i>BsiMI</i>	TCCGGA			78
	<i>BsiOI</i>	TCCGGA			78
	<i>Bsp13I</i>	T ¹ CCGGA			8
	<i>BspEI</i>	T ¹ CCGGA			161
	<i>Bsu22I</i>	TCCGGA			141
	<i>CauB3I</i>	T ¹ CCGGA			194
	<i>Kpn2I</i>	T ¹ CCGGA			38,195
	<i>MroI</i>	T ¹ CCGGA			196
<i>BsrI</i>		ACTGG(1/–1)	MOU		197
<i>BstEII</i>		G ¹ GTNACC	N		197
	<i>AcrII</i>	G ¹ GTNACC		BEGMNOPRSUVX	198,199
	<i>AspAI</i>	G ¹ GTNACC			77
	<i>BsiKI</i>	GGTNACC			43
	<i>Bst3II</i>	GGTNACC			78
	<i>BstDI</i>	GGTNACC			200
	<i>BstPI</i>	G ¹ GTNACC	K		80
					201

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
<i>Cfr</i> 7I		GGTNACC			50
<i>Cfr</i> 19I		GGTNACC			54
<i>Eca</i> I		G1GTNACC	5(6)		202
<i>Eco</i> 91II		G1GTNACC			203,204
<i>Eco</i> O65I		G1GTNACC		G	73,205
<i>Kox</i> I		GGTNACC			206
<i>Nsp</i> S4II		G1GTNACC			97
<i>Sci</i> AII		GGTNACC			77
<i>Bst</i> XI		CCANNNNNNTGG		EGMNORUVX	165,207
<i>Bss</i> GI		CCANNNNNNTGG			165
<i>Bst</i> TI		CCANNNNNNTGG			165
<i>Cau</i> II		CC1SGG			109,110,208
<i>Aha</i> I		CC1SGG			10
<i>Ase</i> II		CC1SGG			209
<i>Asp</i> 1II		CCSGG			150
<i>Bcn</i> I		CC1SGG	2(4)	AK	210-215
<i>Bsp</i> 7I		CCSGG			38
<i>Bsp</i> 8I		CCSGG			38
<i>Bsp</i> 55I		CCSGG			79
<i>Bsp</i> J67I		CCSGG			107
<i>Eci</i> DI		CCSGG			39
<i>Eco</i> 121I		CCSGG			216
<i>Eco</i> 179I		CCSGG			60
<i>Eco</i> 190I		CCSGG			216
<i>Hgi</i> S21I		CCSGG			217
<i>Hgi</i> S22I		CC1SGG			14
<i>Hin</i> 3I		CCSGG			218
<i>Nci</i> I		CC1SGG		BEGMNOUVX	219,220
<i>Pae</i> 181I		CCSGG			60
<i>Rsh</i> II		CCSGG			105
<i>Ssp</i> 2I		CCSGG			150
<i>Tmu</i> 1I		CCSGG			203
<i>Cfr</i>		Y1GGCCR	4(5)		51,215,221,222
<i>Cfr</i> 14I		YGGCCR			50
<i>Cfr</i> 38I		YGGCCR			53
<i>Cfr</i> 39I		YGGCCR			54
<i>Cfr</i> 40I		YGGCCR			54
<i>Eae</i> I		Y1GGCCR	4(5)	EGKMNvx	223,224
<i>Eci</i> BI		YGGCCR			39
<i>Eco</i> 90I		YGGCCR			203
<i>Eco</i> 164I		YGGCCR			150
<i>Eco</i> HI		YGGCCR			33
<i>Cfr</i> 10I		R1CCGGY	2(5)	AKMOU	50,51,215,225
<i>Bsp</i> 21I		RCCGGY			203
<i>Clal</i>		AT1CGAT	5(6)	ABEGKMNPNSVX	226,227
<i>Aag</i> I		AT1CGAT			228
<i>Apu</i> 16I		ATCGAT			229
<i>Asp</i> 707I		ATCGAT			100
<i>Ban</i> III		ATCGAT		OU	5
<i>Bbv</i> AII		AT1CGAT			230
<i>Bcm</i> I		AT1CGAT			231
<i>Bdi</i> I		AT1CGAT			232
<i>Bli</i> 41I		AT1CGAT			8
<i>Bli</i> 86I		AT1CGAT			141
<i>Bli</i> RI		ATCGAT			233
<i>Bsc</i> I		AT1CGAT			43,234
<i>Bsp</i> 2I		ATCGAT			38
<i>Bsp</i> 4I		ATCGAT			38
<i>Bsp</i> 84I		ATCGAT			79
<i>Bsp</i> 106I		AT1CGAT			235
<i>Bsp</i> DI		AT1CGAT			161
<i>Bsp</i> XI		AT1CGAT			164
<i>Bsu</i> 15I		AT1CGAT			229,236
<i>Btu</i> I		ATCGAT			237

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
<i>CviJ</i>	<i>Csp4I</i>	ATCGAT			79
	<i>Lp1I</i>	AT ¹ CGAT			238
	<i>PglB4I</i>	AT ¹ CGAT			8
		RG ¹ CY	3(5)		107,239
	<i>CviKI</i>	RGCY			240
	<i>CviLI</i>	RGCY			240
	<i>CviMI</i>	RGCY			240
	<i>CviNI</i>	RGCY			240
	<i>CviOI</i>	RGCY			240
<i>DdeI</i>		C ¹ TNAG	1(5)	BEGIMNOPRUVX	241-243
	<i>DpnI*</i>	GA ¹ TC		ABEGIMNRSVX	244-246
		GA ¹ TC			247,248
		GATC			249
		GATC			250
		GATC			65
		GATC			65
		GATC			65
		GATC			128
<i>DraII</i>		RG ¹ GNCCY		EGM	251-253
	<i>EcoO109I</i>	RG ¹ GNCCY		AGKNOUVX	254
	<i>PssI</i>	RGGNC ¹ CY	I		147,255
	<i>VneAI</i>	RGGNC ¹ CY			175
	<i>DraIII</i>	CACNNN ¹ GTG		EMNX	251-253
	<i>DrdI</i>	GACNNNN ¹ NNGTC		N	256
	<i>DrdII</i>	GAACCA			257
	<i>DsAI</i>	C ¹ CRYGG		M	258
	<i>EciI</i>	TCCGCC			39
<i>Eco31I</i>		GGTCTC(1/5)			259
	<i>Bli49I</i>	GGTCTC			141
	<i>BsaI</i>	GGTCTC(1/5)	N		81
	<i>Eco42I</i>	GGTCTC			216
	<i>Eco51I</i>	GGTCTC			150
	<i>Eco95I</i>	GGTCTC			260
	<i>Eco97I</i>	GGTCTC			261
	<i>Eco101I</i>	GGTCTC			216
	<i>Eco120I</i>	GGTCTC			216
	<i>Eco127I</i>	GGTCTC			60
	<i>Eco129I</i>	GGTCTC			60
	<i>Eco155I</i>	GGTCTC			216
	<i>Eco156I</i>	GGTCTC			216
	<i>Eco157I</i>	GGTCTC			216
	<i>Eco162I</i>	GGTCTC			60
	<i>Eco185I</i>	GGTCTC			60
	<i>Eco191I</i>	GGTCTC			216
	<i>Eco203I</i>	GGTCTC			216
	<i>Eco204I</i>	GGTCTC			216
	<i>Eco205I</i>	GGTCTC			216
	<i>Eco217I</i>	GGTCTC			55
	<i>Eco225I</i>	GGTCTC			150
	<i>Eco233I</i>	GGTCTC			38
	<i>Eco239I</i>	GGTCTC			150
	<i>Eco240I</i>	GGTCTC			55
	<i>Eco241I</i>	GGTCTC			55
	<i>Eco246I</i>	GGTCTC			38
	<i>Eco247I</i>	GGTCTC			38
	<i>EcoA4I</i>	GGTCTC(1/5)			8
	<i>PpaI</i>	GGTCTC			159
	<i>Sau12I</i>	GGTCTC			203
<i>Eco47III</i>		AGC ¹ GCT		AKMOU	59
	<i>AiiI</i>	AGC ¹ GCT			262
		CTGAAG(16/14)			263
	<i>Bsp6II</i>	CTGAAG			203
	<i>Eco125I</i>	CTGAAG			60
<i>FsfI</i>		CTGAAG			264

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
<i>EcoNI</i>		CCTNN ¹ NNNAGG		N	265
	<i>BstWI</i>	CCTNNNNNAGG			81
<i>EcoRI</i>		G ¹ AATTC	3(6)	ABEGIKMNOPRSUVX	266-268
	<i>Eco82I</i>	GAATTC			260
	<i>Eco159I</i>	GAATTC			60
	<i>Eco228I</i>	GAATTC			55
	<i>Eco237I</i>	GAATTC			150
	<i>Eco252I</i>	GAATTC			150
	<i>HalB6I</i>	G ¹ AATTC			8
	<i>RsrI</i>	G ¹ AATTC			269-271
	<i>SsoI</i>	G ¹ AATTC	2(6)		272,273
<i>EcoRII</i> ⁶		CCWGG	2(5)	BEGOV	274-276
	<i>Acc38I</i>	CCWGG			8
	<i>AeuI</i>	CC ¹ WGG			277
+	<i>AorI</i>	CC ¹ WGG			136
+	<i>Apyl</i>	CC ¹ WGG		M	278
	<i>AtuII</i>	CCWGG			279
	<i>AtuII</i>	CCWGG			203
	<i>AtuBI</i>	CCWGG			280
	<i>BinSI</i>	CCWGG			179
+	<i>BshGI</i>	CC ¹ WGG			281
+	<i>BsiLI</i>	CCWGG			78
+	<i>Bsp56I</i>	CCWGG			79
	<i>Bsp103I</i>	CCWGG			38
	<i>BstGII</i>	CCWGG			165
+	<i>BstNI</i>	CC ¹ WGG		ENX	282
	<i>BstOI</i>	CCWGG			80
	<i>Cdi27I</i>	CCWGG			184
	<i>Cfr5I</i>	CCWGG			50,51
	<i>Cfr11I</i>	CCWGG			50,51
	<i>Cfr20I</i>	CCWGG			54
	<i>Cfr22I</i>	CCWGG			54
	<i>Cfr24I</i>	CCWGG			54
	<i>Cfr25I</i>	CCWGG			54
	<i>Cfr27I</i>	CCWGG			54
	<i>Cfr28I</i>	CCWGG			54
	<i>Cfr29I</i>	CCWGG			54
	<i>Cfr30I</i>	CCWGG			54
	<i>Cfr31I</i>	CCWGG			54
	<i>Cfr35I</i>	CCWGG			54
	<i>CfrS37I</i>	CCWGG			217
	<i>CthII</i>	CC ¹ WGG			283
	<i>EagKI</i>	CCWGG			284
	<i>EcalII</i>	CCWGG			75
	<i>EclII</i>	CCWGG			285
	<i>Ecl66I</i>	CCWGG			261
	<i>Ecl136I</i>	CCWGG			60
	<i>Ecl137II</i>	CCWGG			216
	<i>EclS39I</i>	CCWGG			217
	<i>Eco38I</i>	CCWGG			58
	<i>Eco40I</i>	CCWGG			58
	<i>Eco41II</i>	CCWGG			58
	<i>Eco60I</i>	CCWGG			51
	<i>Eco61II</i>	CCWGG			51
	<i>Eco67I</i>	CCWGG			260
	<i>Eco70I</i>	CCWGG			260
	<i>Eco71II</i>	CCWGG			286
	<i>Eco128I</i>	CCWGG			60
	<i>Eco170I</i>	CCWGG			150
	<i>Eco193I</i>	CCWGG			216
	<i>Eco206I</i>	CCWGG			38
	<i>Eco207I</i>	CCWGG			38
	<i>Esp2I</i>	CCWGG			38
	<i>Fsp1604I</i>	CC ¹ WGG			287

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
	<i>Kox165I</i>	CCWGG			150
	<i>Kpn10I</i>	CCWGG			60
	<i>Kpn13I</i>	CCWGG			60
	<i>Kpn14I</i>	CCWGG			216
	<i>Kpn16I</i>	CCWGG			216
	<i>Mlu2300I</i>	CCWGG			8
	<i>MphI</i>	CCWGG			288
+	<i>MvaI</i>	CC1WGG	2(4)	AKOU	289,290
	<i>Scg2I</i>	CCWGG			291
	<i>Sf2al</i>	CCWGG			292
	<i>Sf2bl</i>	CCWGG			292
	<i>Sgr20I</i>	CCWGG			293
	<i>SleI</i>	CCWGG			294
	<i>SspAI</i>	CCWGG			294
	<i>TaqXI</i>	CC1WGG			295
	<i>ZanI</i>	CC1WGG			296
<i>EcoRV</i>		GAT1ATC	2(6)	ABEGIKMNOPRSUVX	297–299
	<i>Bsp16I</i>	GATATC			38
	<i>BsrRI</i>	GATATC			80
	<i>CeqI</i>	GAT1ATC			300
	<i>Eco32I</i>	GAT1ATC			51,301
	<i>Eco178I</i>	GATATC			60
	<i>Hhal</i>	GAT1ATC			302
	<i>NanI</i>	GATATC			249
	<i>NflAI</i>	GATATC			303
	<i>NsiCI</i>	GAT1ATC			304
<i>EspI</i>		GC1TNAGC		EGU	305
	<i>CelII</i>	GCTNAGC		M	77
	<i>Uba1102I</i>	GC1TNAGC			306
<i>Esp3I</i>		GAGACG(1/5)			79
<i>FauI</i>		CCCGC(4/6)			307
<i>FinI</i>		GTCCC			159
<i>Fnu4HI</i>		GC1NGC		N	308
	<i>Bsp6I</i>	GC1NGC			309
	<i>FbrI</i>	GC1NGC			119
	<i>IspI</i>	GC1NGC			181
	<i>Uur960I</i>	GC1NGC			310
<i>FnuDII</i>		CG1CG			311
	<i>AccII</i>	CG1CG		AEGKVX	6,312
	<i>BceFI</i>	CGCG			313
	<i>BceRI</i>	CGCG			140
	<i>BepI</i>	CG1CG	1(5)		314,315
	<i>Bpu95I</i>	CG1CG			8
	<i>Bsp50I</i>	CG1CG			79
	<i>Bsp70I</i>	CGCG			79
	<i>BspJ76I</i>	CGCG			107
	<i>BstUI</i>	CG1CG		N	80
	<i>Bsu1192II</i>	CGCG			74
	<i>Bsu1193I</i>	CGCG			74,140
	<i>Bsu1532I</i>	CG1CG			316
	<i>Bsu6633I</i>	CGCG			140,317
	<i>BsuEII</i>	CGCG	1(5)		74,318,319
	<i>Cpa1150I</i>	CGCG			87
	<i>CpaAI</i>	CGCG			320
	<i>FspMI</i>	CGCG			159
	<i>Hin1056I</i>	CGCG			321
	<i>MvaAI</i>	CGCG			117
	<i>MviI</i>	CG1CG		M	322
	<i>PflAI</i>	CGCG			32
	<i>Scel</i>	CGCG			77
	<i>Thal</i>	CG1CG		BI	323
	<i>Tmal</i>	CGCG			63
<i>FokI</i>		GGATG(9/13)	3(6), –2(6)	AEGIKMNUVX	324–327
	<i>HinGII</i>	GGATG			328–330

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
<i>FseI</i>		GGCCGGICC			331
<i>GdII</i>		YGGCCG(-5/-1)			332
<i>GsuI</i>		CTGGAG(16/14)			263,333
	<i>Bco35I</i>	CTGGAG			55
	<i>Bsp22I</i>	CTGGAG			203
	<i>Bsp28I</i>	CTGGAG			38
	<i>BspJ74I</i>	CTGGAG			107
<i>HaeI</i>		WGG1CCW			334
<i>HaeII</i>		RGC ₁ CCY		ABEGIKMNOPRSUX	335,336
	<i>Bme142I</i>	RGC ₁ GCY			337
	<i>HinHI</i>	RGC ₁ GCY			338
	<i>NgoI</i>	RGC ₁ GCY			339
<i>HaeIII</i>		GG ₁ CC	3(5)	ABEGIKMNOPRSUVX	340-342
	<i>AcaIV</i>	GGCC			77
	<i>Asp742I</i>	GGCC			217
	<i>AspTIII</i>	GGCC			77
	<i>Bal475I</i>	GGCC			87
	<i>Bal3006</i>	GGCC			87
	<i>Bce71I</i>	GGCC			343
	<i>Bco33I</i>	GGCC			38
	<i>Bfi458I</i>	GGCC			87
	<i>Bim19II</i>	GG ₁ CC			8
	<i>BliI</i>	GGCC			344
	<i>BluII</i>	GGCC			332
	<i>BseI</i>	GGCC			345
	<i>BshI</i>	GGCC			78
	<i>BshAI</i>	GGCC			78
	<i>BshBI</i>	GGCC			78
	<i>BshCI</i>	GGCC			78
	<i>BshDI</i>	GGCC			78
	<i>BshEI</i>	GGCC			78
	<i>BshFI</i>	GG ₁ CC			346
	<i>BsiAI</i>	GGCC			78
	<i>BsiDI</i>	GGCC			78
	<i>BsiHI</i>	GGCC			78
	<i>Bsp71I</i>	GGCC			343
	<i>Bsp211I</i>	GG ₁ CC			343
	<i>Bsp226I</i>	GGCC			343
	<i>BspBRI</i>	GG ₁ CC			347
	<i>BspRI</i>	GG ₁ CC			348-350
	<i>BssCI</i>	GGCC			165
	<i>BstCI</i>	GGCC	G		165
	<i>BstJI</i>	GGCC			80
	<i>Bsu1076I</i>	GGCC			140
	<i>Bsu1114I</i>	GGCC			140
	<i>BsuRI</i>	GG ₁ CC	3(5)	G	341,351,352
	<i>BteI</i>	GGCC			233
	<i>ClnI</i>	GGCC			111
	<i>CltI</i>	GG ₁ CC			353
	<i>Csp2I</i>	GGCC			56
	<i>DsaII</i>	GG ₁ CC			258
	<i>FinSI</i>	GGCC			119
	<i>FnuDI</i>	GG ₁ CC			311
	<i>HhgI</i>	GGCC			75
	<i>MnlI</i>	GGCC			288
	<i>MnnII</i>	GGCC			354
	<i>NgoII</i>	GGCC			355
	<i>NgoPII</i>	GG ₁ CC			304
	<i>NgoSI</i>	GGCC			356
	<i>NlaI</i>	GGCC			357
	<i>PaiI</i>	GGCC			148
	<i>PaiI</i>	GG ₁ CC	EPV		358,359
	<i>Pde133I</i>	GG ₁ CC			8
	<i>PpuI</i>	GGCC			148

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
	<i>Sfa</i> I	GGICC			360
	<i>Sph</i> III	GGCC			361
	<i>Sua</i> I	GGICC			362
	<i>Sul</i> I	GGCC			363
	<i>Tsp</i> ZNI	GGCC			364
	<i>Tie</i> AI	GGCC			365
	<i>Tm</i> I	GGCC			116
	<i>Vha</i> I	GGCC			149
	<i>Vn</i> I	GGCC			175
<i>Hga</i> I		GACGC(5/10)			338,366,367
<i>Hgi</i> AI		GWGCW1C	NX		368
	<i>Alw</i> 21I	GWGCW1C			41
	<i>Asp</i> HI	GWGCW1C	M		369
	<i>Bbv</i> 12I	GWGCW1C			8
	<i>Pph</i> 3215I	GWGCWC			87
<i>Hgi</i> CI		G1GYRCC			15,370
	<i>Acc</i> B1I	G1GYRCC			8
	<i>Ban</i> I	G1GYRCC		EGIMNOPUVX	5,370
	<i>Eco</i> 50I	GGYRCC			150
	<i>Eco</i> 64I	G1GYRCC			260,371
	<i>Eco</i> 168I	GGYRCC			216
	<i>Eco</i> 169I	GGYRCC			150
	<i>Eco</i> 171I	GGYRCC			60
	<i>Eco</i> 173I	GGYRCC			60
	<i>Eco</i> 195I	GGYRCC			216
	<i>Esp</i> 1I	GGYRCC			55
	<i>Esp</i> 6I	GGYRCC			79
	<i>Esp</i> 9I	GGYRCC			79
	<i>Esp</i> 10I	GGYRCC			79
	<i>Esp</i> 11I	GGYRCC			79
	<i>Esp</i> 12I	GGYRCC			79
	<i>Esp</i> 13I	GGYRCC			79
	<i>Esp</i> 14I	GGYRCC			79
	<i>Esp</i> 15I	GGYRCC			150
	<i>Esp</i> 22I	GGYRCC			150
	<i>Hgi</i> HI	G1GYRCC			16
	<i>Msp</i> B4I	G1GYRCC			8
	<i>Ssp</i> M1III	GGYRCC			20
<i>Hgi</i> EII		ACCNNNNNNNGGT			15
<i>Hgi</i> JII		GRGCY1C			16
	<i>Ban</i> II	GRGCY1C		EGIKMNOPRSUVX	5
	<i>Bpu</i> I	GRGCYC			161,372
	<i>Bsp</i> 117I	GRGCYC			38
	<i>Bsp</i> 519I	GRGCY1C			8
	<i>Bsu</i> 1854I	GRGCY1C			316
	<i>Bvu</i> I	GRGCY1C			373
	<i>Cfr</i> 48I	GRGCYC			54
	<i>Eco</i> 24I	GRGCY1C			184,374
	<i>Eco</i> 25I	GRGCYC			184
	<i>Eco</i> 26I	GRGCYC			51
	<i>Eco</i> 35I	GRGCYC			184
	<i>Eco</i> 68I	GRGCYC			261
	<i>Eco</i> 113I	GRGCYC			216
	<i>Eco</i> 180I	GRGCYC			60
	<i>Eco</i> 211I	GRGCYC			38
	<i>Eco</i> 215I	GRGCYC			203
	<i>Eco</i> 216I	GRGCYC			203
	<i>Eco</i> 232I	GRGCYC			55
	<i>Eco</i> T38I	GRGCYC			126
	<i>Eco</i> T88I	GRGCYC			375
	<i>Eco</i> T93I	GRGCYC			375
	<i>Eco</i> T95I	GRGCYC			375
	<i>Kox</i> II	GRGCY1C			206
<i>Hha</i> I		GCG1C	2(5)	ABEGKNOPRSUX	376,377
	<i>Bca</i> I	GCGC			33

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
	<i>Cfo</i> I	GCGIC		BIMRV	147
	<i>Csp</i> 1470I	GCGC			87
	<i>Fnu</i> DIII	GCGIC			311
	<i>Hin</i> 6I	G1CGC			378
	<i>Hin</i> 7I	GCGC			18
	<i>Hin</i> GUI	GCGC			328,379
	<i>Hin</i> P1I	G1CGC		NX	380
	<i>Hin</i> S1I	GCGC			380
	<i>Hin</i> S2I	GCGC			380
	<i>Mnn</i> IV	GCGC			354
	<i>Sci</i> NI	G1CGC			381
<i>Hind</i> II		GTY†RAC	5(6)	M	382–385
	<i>Chu</i> II	GTYRAC			386
	<i>Hin</i> 1160II	GTYRAC			321
	<i>Hin</i> 1161II	GTYRAC			321
	<i>Hin</i> JCI	GTY†RAC			387
	<i>Hinc</i> II	GTY†RAC		ABEGIKNOPRSUVX	388
	<i>Mnn</i> I	GTYRAC			354
<i>Hind</i> III		A1AGCTT	1(6)	ABEGIKMNOPRSUVX	384,385,389
	<i>Asp</i> 52I	AAGCTT			217
	<i>Asp</i> 3065I	AAGCTT			390
	<i>Bbr</i> I	AAGCTT			75
	<i>Bpu</i> I	AAGCTT			391,392
	<i>Bst</i> FI	A1AGCTT			393
	<i>Cfr</i> 32I	AAGCTT			54
	<i>Chu</i> I	AAGCTT			386
	<i>Eco</i> VIII	A1AGCTT			394
	<i>Eco</i> 65I	AAGCTT			261
	<i>Eco</i> 98I	AAGCTT			261
	<i>Eco</i> 188I	AAGCTT			216
	<i>Eco</i> 231I	AAGCTT			55
	<i>Hin</i> 5III	AAGCTT			18
	<i>Hin</i> 173I	AAGCTT			328
	<i>Hin</i> 1076III	AAGCTT			321
	<i>Hin</i> JCI	AAGCTT			387
	<i>Hin</i> bIII	AAGCTT			75,395
	<i>Hin</i> fII	AAGCTT			396
	<i>Hsu</i> I	A1AGCTT			75
	<i>Mka</i> I	AAGCTT			288
<i>Hinf</i> I		G1ANTC		ABEGIKMNOPRSUVX	395,397,398
	<i>Cvi</i> BI	G1ANTC			399
	<i>Cvi</i> CI	GANTC			399
	<i>Cvi</i> DI	GANTC			399
	<i>Cvi</i> EI	GANTC			399
	<i>Cvi</i> FI	GANTC			399
	<i>Cvi</i> GI	GANTC			399
	<i>Fnu</i> AI	G1ANTC			311
	<i>Hha</i> II	G1ANTC	2(6)		400–402
	<i>Nca</i> I	GANTC			403
	<i>Nov</i> II	GANTC			403
	<i>Nsi</i> HI	GANTC			404
<i>Hpa</i> I		GTT†AAC	5(6)	ABEGIKMNOPRSUVX	405–407
	<i>Bse</i> II	GTTAAC			345
	<i>Ssr</i> I	GTT†AAC			408
	<i>Ssr</i> B6I	GTT†AAC			8
<i>Hpa</i> II		C1CGG	2(5)	BEGMNOPRSUVX	342,405,406
	<i>Asp</i> 748I	CCGG			217
	<i>Bsi</i> SI	CCGG			78
	<i>Bsp</i> 5I	CCGG			38
	<i>Bsp</i> 47I	CCGG			79
	<i>Bsp</i> 48I	CCGG			79
	<i>Bsp</i> 116I	CCGG			38
	<i>Bsr</i> 40I	C1CGG			8
	<i>Bsu</i> 1192I	CCGG			74,140
	<i>Bsu</i> FI	CCGG	1(5)		74,140,319

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
	<i>Fin</i> II	CCGG			159
	<i>Hap</i> II	C1CGG		AGIK	338,409
	<i>Hin</i> 2I	CCGG			218
	<i>Hin</i> 5I	CCGG			18
	<i>Mn</i> II	CCGG			288
	<i>Mn</i> 1I	C1CGG			75,410
	<i>Msp</i> I	C1CGG	1(5)	ABEGIKMNOPRSUVX	154,411,412
	<i>Pde</i> 137I	C1CGG			8
	<i>Sec</i> II	CCGG			413
	<i>Sfa</i> GUI	CCGG			414
<i>Hph</i> I		GGTGA(8/7)	-2(5)	NVX	395,415,416
	<i>Ngo</i> BI	GGTGA	-2(5)		417,418
<i>Kpn</i> I		GGTAC1C		ABEGIKMNOPRSUVX	419,420
	<i>Acc</i> 65I	G1GTACC			8
	<i>Aha</i> B8I	G1GTACC			8
	<i>Asp</i> 718I	G1GTACC		M	421
	<i>Bsp</i> J106I	GGTACC			107
	<i>Eco</i> 149I	GGTACC			60
	<i>Esp</i> 19I	GGTACC			55
	<i>Kpn</i> K14I	GGTACC			217
	<i>Nm</i> II	GGTACC			422
	<i>Sau</i> 10I	GGTACC			203
	<i>Sth</i> I	G1GTACC			423,424
	<i>Sth</i> AI	GGTACC			122
	<i>Sth</i> BI	GGTACC			122
	<i>Sth</i> CI	GGTACC			122
	<i>Sth</i> DI	GGTACC			122
	<i>Sth</i> EI	GGTACC			122
	<i>Sth</i> FI	GGTACC			122
	<i>Sth</i> GI	GGTACC			122
	<i>Sth</i> HI	GGTACC			122
	<i>Sth</i> JI	GGTACC			122
	<i>Sth</i> KI	GGTACC			122
	<i>Sth</i> LI	GGTACC			122
	<i>Sth</i> MI	GGTACC			122
	<i>Sth</i> NI	GGTACC			375,424
<i>Ksp</i> 632I		CTCTTC(1/4)		M	425
	<i>Ear</i> I	CTCTTC(1/4)		N	426
	<i>Uba</i> 1104I	CTCTTC(1/5)			427
<i>Mae</i> I		C1TAG		M	428
	<i>Mja</i> I	CTAG			62
<i>Mae</i> II		A1CGT		M	428
<i>Mae</i> III		1GTNAC		M	428
<i>Mbo</i> I ⁷		1GATC		BEGIKNOPRSVX	429
+	<i>Bce</i> 243I	1GATC			430
+	<i>Bme</i> 12I	GATC			431
	<i>Bsa</i> PI	GATC			165
	<i>Bsp</i> 9I	GATC			38
	<i>Bsp</i> 18I	GATC			38
+	<i>Bsp</i> 49I	GATC			79
+	<i>Bsp</i> 51I	GATC			79
+	<i>Bsp</i> 52I	GATC			79
+	<i>Bsp</i> 54I	GATC			79
+	<i>Bsp</i> 57I	GATC			79
+	<i>Bsp</i> 58I	GATC			79
+	<i>Bsp</i> 59I	GATC			79
+	<i>Bsp</i> 60I	GATC			79
+	<i>Bsp</i> 61I	GATC			79
+	<i>Bsp</i> 64I	GATC			343
+	<i>Bsp</i> 65I	GATC			79
+	<i>Bsp</i> 66I	GATC			79
+	<i>Bsp</i> 67I	1GATC			343
+	<i>Bsp</i> 72I	GATC			79
	<i>Bsp</i> 74I	GATC			343

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
	<i>Bsp</i> 76I	GATC			343
+	<i>Bsp</i> 91I	GATC			79
	<i>Bsp</i> 105I	↑GATC			343
+	<i>Bsp</i> 122I	GATC			79
+	<i>Bsp</i> 2095I	↑GATC			8
+	<i>Bsp</i> AI	↑GATC			49
+	<i>Bsp</i> J64I	GATC			79
	<i>Bsr</i> PII	GATC			165
	<i>Bss</i> GII	GATC			165
	<i>Bst</i> ELII	GATC			75,198,432
	<i>Bst</i> XII	GATC			165
+	<i>Btc</i> I	GATC			433
	<i>Cac</i> I	↑GATC			434
+	<i>Ccy</i> I	↑GATC			435
	<i>Cin</i> 1467I	GATC			87
	<i>Cpa</i> I	GATC			349
+	<i>Cpf</i> I	↑GATC			251
+	<i>Csp</i> 5I	GATC			79
	<i>Cte</i> 1179I	GATC			87
	<i>Cte</i> 1180	GATC			87
	<i>Cty</i> I	GATC			320
	<i>Cvi</i> AI	↑GATC	2(6)		436,437
	<i>Cvi</i> HI	GATC			240
	<i>Dpn</i> II	GATC			244,246
	<i>Fnu</i> All	GATC			75,311
	<i>Fnu</i> CI	↑GATC			311
+	<i>Fnu</i> EI	↑GATC			311
	<i>Hac</i> I	↑GATC			438
+	<i>Kzo</i> 9I	↑GATC			104
	<i>Meu</i> I	GATC			30
	<i>Mkr</i> AI	GATC			233
	<i>Mme</i> II	GATC			439
	<i>Mn</i> III	GATC			75
	<i>Mos</i> I	GATC			429
	<i>Msp</i> 67II	GATC			46
+	<i>Msp</i> BI	GATC			117
	<i>Mth</i> I	GATC			165
	<i>Mth</i> 1047I	GATC			87
	<i>Mth</i> AI	GATC			117
	<i>Nde</i> II	↑GATC	BGM		403
	<i>Nf</i> I	GATC			403
	<i>Nf</i> II	GATC			303
	<i>Nf</i> IBI	GATC			440
	<i>Nla</i> II	↑GATC			357
	<i>Nla</i> DI	GATC			64
	<i>Nme</i> CI	↑GATC			304
	<i>Nph</i> I	↑GATC			304
	<i>Nsi</i> AI	GATC			441
	<i>Nsp</i> AI	GATC			30
	<i>Nsu</i> I	GATC			65
+	<i>Pci</i> 9403I	GATC			142
	<i>Pf</i> al	GATC			411
	<i>Rl</i> uII	GATC			203
	<i>Sal</i> AI	GATC			265
	<i>Sal</i> HI	GATC			265
+	<i>Sau</i> 3AI	↑GATC	4(5)	ABEGIKMNOPRSUVX	442,443
	<i>Sau</i> 6782I	GATC			444
+	<i>Sau</i> CI	GATC			445
+	<i>Sau</i> DI	GATC			445
+	<i>Sau</i> EI	GATC			445
+	<i>Sau</i> FI	GATC			445
+	<i>Sau</i> GI	GATC			445
+	<i>Sau</i> MI	GATC			233
+	<i>Sin</i> MI	GATC			65

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
<i>Mbo</i> II	<i>Tru</i> II	GATC GAAGA(8/7)		BGIKNPRSUVX	429,446–448
	<i>Ncu</i> I	GAAGA			65
	<i>Tce</i> I	GAAGA			363
<i>Mcr</i> I		C1GRYCG			449
<i>Mfe</i> I		CAATTG			450
<i>Mlu</i> I		A1CGCGT		ABEGIKMNOPRUVX	324
	<i>Apel</i>	ACGCCT			265
	<i>Uba</i> 6I	ACGCCT			55
<i>Mly</i> I		GASTC			42
<i>Mme</i> I		TCCRAC(20/18)			439
<i>Mnl</i> I		CCTC(7/7)		EGNX	154,451
<i>Mse</i> I		T1TAA		N	452
<i>Mst</i> I	<i>Tru</i> 9I	T1TAA		X	8
	<i>Aca</i> III	TGCGCA			153,453
	<i>Aos</i> I	TGC1GCA		G	77
	<i>Av</i> III	TGC1GCA		M	11
	<i>Clc</i> II	TGCGCA			70
	<i>Cl</i> II	TGCGCA			77
	<i>Fdi</i> II	TGC1GCA		U	68
	<i>Fsp</i> I	TGC1GCA		EGNS	115,116
	<i>Gsp</i> AII	TGCGCA			83,454
	<i>Nsp</i> HIII	TGCGCA			78
	<i>Nsp</i> LI	TGCGCA			70
	<i>Nsp</i> MI	TGCGCA			68,69
	<i>Mwo</i> I	GCNNNNN1NNGC			69,77
<i>Nae</i> I		GCC1GGC		EGKMNOUNVX	455
	<i>Am</i> II	GCCGGC			456
	<i>An</i> MI	GCCGGC			32
	<i>Ape</i> AI	GCCGGC			159
	<i>Apr</i> I	GCCGGC			32
	<i>Eco</i> 56I	G1CCGGC			30
	<i>Esp</i> SI	GCCGGC			51,457
	<i>Mis</i> I	GCCGGC			203
	<i>Nas</i> WI	GCCGGC			198
	<i>Nba</i> I	GCCGGC			30
	<i>Nbr</i> I	GCCGGC			74
	<i>Ngo</i> AIV	G1CCGGC			74
	<i>Ngo</i> MI	GCCGGC			458
	<i>Nmu</i> I	GCCGGC			459
	<i>Nmu</i> FI	GCCGGC			403
	<i>Nsp</i> WI	GCCGGC			65
	<i>Nta</i> SII	GCCGGC			30
	<i>Pg</i> II	GCCGGC			119
	<i>Psp</i> 6II	GCCGGC			460
	<i>Rlu</i> I	GCCGGC			46
	<i>Sac</i> AI	GCCGGC			461–463
	<i>Sal</i> CI	GCCGGC			57
	<i>Sao</i> I	GCCGGC			32
	<i>Sau</i> AI	GCCGGC			464
	<i>Sau</i> BMKI	GCC1GGC			440
	<i>Ska</i> I	GCCGGC			465
	<i>Slu</i> 1777I	GCC1GGC			65
		GG1CGCC		BEGMNOPVX	87
<i>Nar</i> I	<i>Bbe</i> I	GGCGC1C		AK	466
	<i>Bbe</i> AI	GGCGCC			467
	<i>Bin</i> SII	GGCGCC			179
	<i>Eco</i> 78I	GGC1GCC			179
	<i>Ehe</i> I	GGC1GCC		OU	468
	<i>Mch</i> I	GG1CGCC			469,470
	<i>Mly</i> 113I	GG1CGCC			471
	<i>Nam</i> I	GGCGCC			8
	<i>Nda</i> I	GG1CGCC			472
					473

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
<i>NcoI</i>	<i>NunII</i>	GG1CGCC		G	165
	<i>SfoI</i>	GGCGCC			159
<i>NdeI</i>	<i>Bsp19I</i>	C1CATGG	4(6)	ABEGIKMNOPRUVX	165
	<i>NspSAIII</i>	C1CATGG CCATGG			8 97
<i>NheI</i>		CA1TATG			
<i>NlaIII</i>		G1CTAGC			
<i>NlaIV</i>	<i>Hin1II</i>	CATG1			
	<i>Hin8II</i>	CATG			
		GGN1NCC			
<i>NotI</i>	<i>AspNI</i>	GGN1NCC			357
	<i>BcrI</i>	GGNNCC			181
	<i>Bsp29I</i>	GGNNCC			262
	<i>BssI</i>	GGNNCC			38
	<i>Rlu3I</i>	GGNNCC			81
<i>NruI</i>		GC1GGCCGC		ABEGIKMNOPRSUVX	478,479
		TCG1CGA		ABEGIKMNOPIUV	422
<i>NspI</i>	<i>Amal</i>	TCGCGA			149
	<i>Bsp68I</i>	TCGCGA			79
	<i>MluB2I</i>	TCG1CGA			8
	<i>SalDI</i>	TCGCGA			32
	<i>Sbo13I</i>	TCG1CGA			126
	<i>Sna3286I</i>	TCGCGA			87
<i>NspBII</i>	<i>SpoI</i>	TCG1CGA		R	416
	<i>NspHI</i>	RCATG1Y		AKMU	67
<i>MspAII</i>		RCATG1Y		G	85
		CMG1CKG		G	85
<i>PflMI</i>		CMG1CKG			
<i>PleI</i>	<i>AccB7I</i>	CCANNNN1NTGG			159
	<i>Van91I</i>	CCANNNN1NTGG			8
<i>PmaCI</i>		CCANNNN1NTGG			128
		GAGTC(4/5)			480
<i>PpuMI</i>	<i>BbrPI</i>	CAC1GTG		K	481
	<i>BcoAI</i>	CAC1GTG		M	482
	<i>Bsp87I</i>	CACGTG			483
	<i>Eco72I</i>	CAC1GTG			79
	<i>PmlI</i>	CAC1GTG			484
<i>PshAI</i>	<i>UbaII</i>	RG1GWCCY		N	485
	<i>Uba1106I</i>	RG1GWCCY			159,486
		RGGWCCY			22
<i>PstI</i>		GACNN1NNGTC			128
		CTGCA1G			487
<i>AinI</i>	<i>Ali2882I</i>	CTGCAG			77
	<i>AliAJI</i>	CTGCAG			139
	<i>Asp36I</i>	CTGCA1G			490
	<i>Asp708I</i>	CTGCAG			184
	<i>Asp713I</i>	CTGCA1G			100
	<i>AspTI</i>	CTGCAG			14
	<i>BblI</i>	CTGCAG			77
	<i>Bce170I</i>	CTGCAG			13
	<i>Bsp17I</i>	CTGCAG			140
	<i>Bsp43I</i>	CTGCAG			38
	<i>Bsp63I</i>	CTGCA1G			55
	<i>Bsp78I</i>	CTGCAG			343
	<i>Bsp81I</i>	CTGCAG			343
	<i>Bsp93I</i>	CTGCAG			79
	<i>Bsp107I</i>	CTGCAG			79
	<i>Bsp108I</i>	CTGCAG			38
	<i>BspBI</i>	CTGCA1G			38
	<i>BsuBI</i>	CTGCAG			49
	<i>CauIII</i>	CTGCAG			140,491
					492

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
	<i>CfiI</i>	CTGCA ¹ G			438
	<i>CfrA4I</i>	CTGCA ¹ G			493
	<i>CfuII</i>	CTGCA ¹ G			494
	<i>ClcI</i>	CTGCAG			77
	<i>CstI</i>	CTGCA ¹ G			495
	<i>EaePI</i>	CTGCAG			313
	<i>Ecl77I</i>	CTGCAG			261
	<i>Ecl133I</i>	CTGCAG			60
	<i>Ecl593I</i>	CTGCAG			217
	<i>Eco48I</i>	CTGCAG			150
	<i>Eco49I</i>	CTGCAG			150
	<i>Eco83I</i>	CTGCAG			261
	<i>Eco161I</i>	CTGCAG			60
	<i>Eco167I</i>	CTGCAG			60
	<i>Esp5II</i>	CTGCAG			203
	<i>Esp141I</i>	CTGCAG			216
	<i>GseII</i>	CTGCAG			61
	<i>Ha/B6II</i>	CTGCA ¹ G			8
	<i>Kpn12I</i>	CTGCAG			60
	<i>MauI</i>	CTGCAG			148
	<i>MkrI</i>	CTGCAG			30
	<i>NasI</i>	CTGCAG			119
	<i>NgbI</i>	CTGCAG			30
	<i>NocI</i>	CTGCAG			422
	<i>PmaI</i>	CTGCAG			154
	<i>Pma44I</i>	CTGCAG			496
	<i>PmyI</i>	CTGCAG			497
	<i>SalPI</i>	CTGCA ¹ G			498,499
	<i>SfiI</i>	CTGCA ¹ G			288
	<i>SkalII</i>	CTGCAG			65
	<i>XmaII</i>	CTGCAG			500
	<i>XorI</i>	CTGCAG			501
	<i>XphI</i>	CTGCAG			502
	<i>YenI</i>	CTGCA ¹ G			503
	<i>YenAI</i>	CTGCAG			503
	<i>YenBI</i>	CTGCAG			503
	<i>YenCI</i>	CTGCAG			503
	<i>YenDI</i>	CTGCAG			503
	<i>YenEI</i>	CTGCAG			503
<i>PvuI</i>		CGAT ¹ CG		ABEGKMNOPRSUVX	504
	<i>Bmal</i>	CGATCG			32,505,506
	<i>BmaAI</i>	CGATCG			33
	<i>BmaBI</i>	CGATCG			32
	<i>BmaCI</i>	CGATCG			32
	<i>BmaDI</i>	CGATCG			32
	<i>Cfr5II</i>	CGATCG			38
	<i>DraIII</i>	CGATCG			257
	<i>EclI</i>	CGATCG			507
	<i>ErhB9I</i>	CGAT ¹ CG			8
	<i>NblII</i>	CGAT ¹ CG			154
	<i>Ple19I</i>	CGAT ¹ CG			8
	<i>Psu161II</i>	CGAT ¹ CG			8
	<i>RshI</i>	CGAT ¹ CG			508
	<i>RspI</i>	CGATCG			509
	<i>SmaAIII</i>	CGATCG			20
	<i>SplAIII</i>	CGATCG			20
	<i>Xba3216I</i>	CGATCG			87
	<i>Xba3217I</i>	CGATCG			87
	<i>Xba3218I</i>	CGATCG			87
	<i>Xba3219I</i>	CGATCG			87
	<i>Xba3220I</i>	CGATCG			87
	<i>XmlI</i>	CGATCG			510
	<i>XmlAI</i>	CGATCG			510
	<i>XnlI</i>	CGATCG			354
	<i>XorII</i>	CGAT ¹ CG	B		501,504

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
<i>Pvu</i> II		CAG ¹ CTG			
	<i>Bav</i> I	CAG ¹ CTG	4(4)	ABEGIKMNOPRSUVX	504,511 512
	<i>Bav</i> AI	CAG ¹ CTG			513
	<i>Cfr</i> 6I	CAG ¹ CTG	4(4)		50,51,511 8,285
	<i>Ecl</i> I	CAG ¹ CTG			77
	<i>Gsp</i> I	CAGCTG			514
	<i>Mz</i> I	CAGCTG			233
	<i>Nme</i> RI	CAGCTG			142
	<i>Pvu</i> HKUI	CAGCTG			77
	<i>Sba</i> I	CAGCTG			20
	<i>Sci</i> AII	CAGCTG			142
	<i>Sma</i> IV	CAGCTG			20
	<i>Sol</i> 3335I	CAGCTG			20
	<i>Spl</i> IV	CAGCTG			515
<i>Rle</i> AI		CCCACA(12/9)			516
<i>Rsa</i> I		GT ¹ AC		ABEGIMNOPRSUVX	517
	<i>Afa</i> I	GT ¹ AC			150
	<i>Csp</i> 6I	G ¹ TAC			518
	<i>Cvi</i> QI	G ¹ TAC			519
<i>Rsr</i> II		CG ¹ GWCCG		BEGNX	32
	<i>Cpo</i> I	CGGWCCG			520
	<i>Csp</i> I	CGGWCCG			521
<i>Sac</i> I		GAGCT ¹ C		AEGIKMNOPRSUVX	22
	<i>Ecl</i> 136II	GAG ¹ CTC			216
	<i>Ecl</i> 137I	GAGCTC			148
	<i>Eco</i> ICRI	GAGCTC			119
	<i>Nas</i> SI	GAGCTC			464
	<i>Sco</i> I	GAGCTC			522,523
	<i>Sst</i> I	GAGCT ¹ C	B	EINOPRUVX	521
<i>Sac</i> II		CCGC ¹ GG			70
	<i>Aos</i> III	CCGC ¹ GG			75,353
	<i>Bac</i> I	CCGC ¹ GG			87
	<i>Bac</i> 465I	CCGC ¹ GG			38
	<i>Bsp</i> 1I	CCGC ¹ GG			53
	<i>Cfr</i> 37I	CCGC ¹ GG			53
	<i>Cfr</i> 41I	CCGC ¹ GG			17
	<i>Cfr</i> 42I	CCGC ¹ GG			54
	<i>Cfr</i> 43I	CCGC ¹ GG			54
	<i>Cfr</i> 45II	CCGC ¹ GG			524
	<i>Csc</i> I	CCGC ¹ GG			257
	<i>Drd</i> AI	CCGC ¹ GG			257
	<i>Drd</i> BI	CCGC ¹ GG			257
	<i>Drd</i> CI	CCGC ¹ GG			257
	<i>Drd</i> EI	CCGC ¹ GG			525
	<i>Drd</i> FI	CCGC ¹ GG			257
	<i>Dsp</i> II	CCGC ¹ GG			55
	<i>Eae</i> 46I	CCGC ¹ GG			8
	<i>Ecc</i> I	CCGC ¹ GG			75,526
	<i>Ecl</i> 28I	CCGC ¹ GG			184
	<i>Ecl</i> 37I	CCGC ¹ GG			58
	<i>Eco</i> 55I	CCGC ¹ GG			150
	<i>Eco</i> 92I	CCGC ¹ GG			261
	<i>Eco</i> 96I	CCGC ¹ GG			261
	<i>Eco</i> 99I	CCGC ¹ GG			261
	<i>Eco</i> 100I	CCGC ¹ GG			216
	<i>Eco</i> 104I	CCGC ¹ GG			286
	<i>Eco</i> 134I	CCGC ¹ GG			60
	<i>Eco</i> 135I	CCGC ¹ GG			60
	<i>Eco</i> 158I	CCGC ¹ GG			216
	<i>Eco</i> 182I	CCGC ¹ GG			60
	<i>Eco</i> 196I	CCGC ¹ GG			60
	<i>Eco</i> 208I	CCGC ¹ GG			38
	<i>Fsc</i> I	CCGC ¹ GG			527
	<i>Gall</i>	CCGC ¹ GG			438
	<i>Gce</i> I	CCGC ¹ GG			438

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
	<i>Gce</i> GLI	CCGC1GG			528
	<i>Ksp</i> I	CCGC1GG		EM	529
	<i>Mra</i> I	CCGCGG		G	530
	<i>Ngo</i> III	CCGC GG			531
	<i>Ngo</i> AIII	CCGC1GG			532
	<i>Ngo</i> DI	CCGCGG			250
	<i>Ngo</i> PIII	CCGC1GG			304
	<i>Nla</i> DIII	CCGCGG			64
	<i>Nla</i> SI	CCGCGG			19
	<i>Pae</i> AI	CCGC1GG			113,493
	<i>Sa</i> al	CCGCGG			159
	<i>Sab</i> I	CCGCGG			464
	<i>Sak</i> I	CCGCGG			57
	<i>Sbo</i> I	CCGCGG			533,534
	<i>Sfr</i> I	CCGCGG			533,534
	<i>Sfr</i> 303I	CCGC1GG			8
	<i>Sfr</i> 382I	CCGCGG			87
	<i>Shy</i> I	CCGCGG			535
	<i>Sse</i> II	CCGCGG			61
	<i>Ssp</i> 1725I	CCGCGG			87
	<i>Sst</i> II	CCGC1GG		B	522
	<i>Tg</i> II	CCGCGG			152
<i>Sai</i> I		G1TCGAC		ABEGIKMNOPRSUVX	536
	<i>Hgi</i> CIII	G1TCGAC			15
	<i>Hgi</i> DII	G1TCGAC			15
	<i>Koy</i> I	GTCGAC			32
	<i>Nop</i> I	G1TCGAC			154
	<i>Rf</i> FI	GTCGAC			537
	<i>Rhe</i> I	GTCGAC			149
	<i>Rhp</i> I	GTCGAC			149
	<i>Rrh</i> I	GTCGAC			74
	<i>Rro</i> I	GTCGAC			74
	<i>Xam</i> I	GTCGAC			536
	<i>Xci</i> I	G1TCGAC			538
<i>Sau</i> I		CC1TNAGG	M		539
	<i>Aoc</i> I	CC1TNAGG	E		70
	<i>Axyl</i>	CC1TNAGG	GV		540
	<i>Bse</i> 21I	CC1TNAGG			541
	<i>Bsu</i> 36I	CC1TNAGG	N		542
	<i>Cvn</i> I	CC1TNAGG	B		543,544
	<i>Eci</i> CI	CCTNAGG			39
	<i>Eco</i> 76I	CCTNAGG			261
	<i>Eco</i> 81I	CC1TNAGG	AKOU		545
	<i>Eco</i> 115I	CCTNAGG			216
	<i>Eco</i> 118I	CCTNAGG			216
	<i>Lnu</i> 60I	CC1TNAGG			8
	<i>Mst</i> II	CC1TNAGG	EX		154
	<i>Oxa</i> NI	CC1TNAGG			155
	<i>Sec</i> III	CCTNAGG			413
	<i>Ssh</i> AI	CC1TNAGG			546
<i>Scal</i>		AGT1ACT		ABEGIKMNOPRSUVX	547,548
	<i>Asp</i> 763I	AGTACT			217
	<i>Bst</i> MI	AGTACT			80
<i>Scr</i> FI		CC1NGG		EGMNOSVX	549
	<i>Bsp</i> 53I	CCNGG			79
	<i>Bsp</i> 73I	CCNGG			79
	<i>Dsa</i> V	1CCNGG	M		7
	<i>Eco</i> 43I	CCNGG			550
	<i>Eco</i> 51II	CCNGG			150
	<i>Eco</i> 80I	CCNGG			261
	<i>Eco</i> 85I	CCNGG			550
	<i>Eco</i> 93I	CCNGG			261
	<i>Eco</i> 153I	CCNGG			216
	<i>Eco</i> 200I	CCNGG			60

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
<i>Sdul</i>	<i>Msp</i> 67I	CC ¹ NGG	2(5)		46
	<i>Sso</i> II	1CCNGG			272,551
		GDGCH ¹ C			552,553
	<i>Aoc</i> II	GDGCH ¹ C			70
	<i>Bka</i> 1125I	GDGCHC			87
	<i>Bmy</i> I	GDGCH ¹ C		M	554
<i>Sec</i> I	<i>Bsp</i> 1286I	GDGCH ¹ C	EGKNRUX		75,140,555
	<i>Nsp</i> II	GDGCH ¹ C			67
		C ¹ CNNGG			413
	<i>Bsa</i> II	C ¹ CNNGG		N	80
	<i>Sfa</i> NI	GCATC(5/9)		NX	163
	<i>Bsc</i> AI	GCATC			556
<i>Sfe</i> I	<i>Bdi</i> SI	C ¹ TRYAG			557
		C ¹ TRYAG			558
	<i>Sfi</i> I	GGCCNNNN ¹ NGGCC		BEGINOPRSUVX	559
	<i>Sgr</i> AI	CR ¹ CCGGY ^G			560
	<i>Sma</i> I	CCC ¹ GGG	3(5)	ABEGIKMNOPRSUVX	500,561,562
	<i>Ahy</i> I	C ¹ CCGGG			485
<i>Sna</i> I	<i>Cfr</i> 9I	C ¹ CCGGG	2(4)	O	50,51,562
	<i>Cfr</i> 4I	CCC ¹ GGG			233
	<i>Ecl</i> RI	CCC ¹ GGG			233
	<i>Pae</i> BI	CCC ¹ GGG			563
	<i>Xcy</i> I	C ¹ CCGGG			564
	<i>Xma</i> I	C ¹ CCGGG		EINRVX	500
<i>Sna</i> BI		GTATA ^C			565
	<i>Uba</i> 1107I	GTA ¹ TAC			427
	<i>Xca</i> I	GTA ¹ TAC			566
	<i>Eci</i> AI	TAC ¹ GTA		EGMNVX	567
	<i>Eco</i> 105I	TAC ¹ GTA		OU	39
	<i>Eco</i> 158II	TAC ¹ GTA			22
<i>Ssp</i> I	<i>Ssp</i> JI	TAC ¹ GTA			216
	<i>Ssp</i> M1I	TAC ¹ GTA			20
	<i>Ssp</i> M2I	TAC ¹ GTA			20
	<i>Spe</i> I	A ¹ CTAGT		BEGKMNORSUX	20
	<i>Sph</i> I	GCATG ¹ C		ABEGIKMNOPRSUVX	568
				R	422
<i>SpI</i>	<i>Bbv</i> I	GCATG ¹ C			569
	<i>Bsp</i> 121I	GCATGC			38
	<i>Pae</i> I	GCATG ¹ C			570
	<i>Spa</i> XI	GCATGC			148
	<i>SpII</i>	CCGC			32
	<i>Pfu</i> I	C ¹ GTACG		AK	361
<i>Ssp</i> I	<i>Sma</i> AI	CGTACG			32
	<i>Spl</i> AI	CGTACG			20
	<i>Ssp</i> KI	CGTACG			20
		AAT ¹ ATT		BEGMNORVX	548
		AGG ¹ CCT		ABEGIKMNPRVX	571
	<i>Aat</i> I	AGG ¹ CCT		OU	5
<i>Stu</i> I	<i>Asp</i> 78I	AGGCCT			217
	<i>Chy</i> I	AGGCCT			33
	<i>Eco</i> 147I	AGG ¹ CCT			38,572
	<i>Gdi</i> I	AGG ¹ CCT			332
	<i>Nta</i> SI	AGGCCT			119
	<i>Pme</i> 55I	AGG ¹ CCT			8
<i>Sty</i> I	<i>Sar</i> I	AGGCCT			556
	<i>Ssv</i> I	AGGCCT			573
	<i>Ste</i> I	AGGCCT			573
		C ¹ CWWGG		BEGMNRVX	574
	<i>Bss</i> TII	C ¹ CWWGG			8
	<i>Eco</i> 130I	C ¹ CWWGG		U	38,575
	<i>Eco</i> 208II	CCWWGG			38
	<i>Eco</i> T14I	C ¹ CWWGG		AK	576
	<i>Eco</i> T104I	CCWWGG			576

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
	<i>Erh</i> B9II	C1CWWGG			8
	<i>Sbl</i> AI	CCWWGG			375
	<i>Sbl</i> BI	CCWWGG			375
	<i>Sbl</i> CI	CCWWGG			375
<i>Taq</i> I		T1CGA	4(6)	BEGINNOPRSUVX	577,578
	<i>Tfl</i> I	TCGA			578
	<i>Tth</i> HB8I	T1CGA	4(6)	AK	578-581
<i>Taq</i> II ⁸		GACCGA(11/9) CACCCA(11/9)			75,582
<i>Tfl</i> I		GAWTC			583
<i>Tsp</i> 45I		GTSAC			584
<i>Tsp</i> EI		AATT			585
<i>Tth</i> 111I		GACN1NNGTC		AEGIKNPVX	586
	<i>Asp</i> I	GACN1NNGTC	M		587
	<i>Fsu</i> I	GACNNNGTC			464
	<i>Nta</i> I	GACNNNGTC			119
	<i>Sma</i> All	GACNNNGTC			20
	<i>Spl</i> II	GACNNNGTC			361
	<i>Spl</i> AII	GACNNNGTC			20
	<i>Tsp</i> I	GACNNNGTC			81
	<i>Tre</i> I	GACNNNGTC			586
	<i>Ttr</i> I	GACNNNGTC			586
<i>Tth</i> 111II		CAARCA(11/9)			588
<i>Uba</i> 1105I		GACNNN1NNGTC			589
<i>Uba</i> 1108I		TCGTAG			590
<i>Vsp</i> I		AT ¹ TAAT			591
	<i>Ase</i> I	AT ¹ TAAT	N		209
	<i>Asn</i> I	AT ¹ TAAT	M		592
<i>Xba</i> I		T ¹ CTAGA		ABEGIKMNOPRSUVX	593
<i>Xcm</i> I		CCANNNNN1NNNNTGG		N	32
<i>Xho</i> I		C ¹ TCGAG		ABEGIKMNOPRSUVX	594
	<i>Abr</i> I	C ¹ TCGAG			595
	<i>Asp</i> 47I	CTCGAG			217
	<i>Asp</i> 703I	CTCGAG			100
	<i>Bad</i> I	CTCGAG			191
	<i>Bbf</i> I	CTCGAG			191
	<i>Bbi</i> III	CTCGAG			13
	<i>Blu</i> I	C ¹ TCGAG			594
	<i>Bsp</i> 92I	CTCGAG			79
	<i>Bss</i> HI	CTCGAG			165
	<i>Bst</i> HI	CTCGAG			165
	<i>Bst</i> LI	CTCGAG			80
	<i>Bst</i> VI	C ¹ TCGAG	5(6)	G	596-598
	<i>Bsu</i> MI	CTCGAG	3(5)		140,319
	<i>Bth</i> I	CTCGAG			179
	<i>Ccr</i> I	C ¹ TCGAG		X	599
	<i>Cja</i> I	CTCGAG			471
	<i>Dde</i> II	CTCGAG			75
	<i>Drd</i> DI	CTCGAG			525
	<i>Mav</i> I	C ¹ TCGAG			600
	<i>Mca</i> I	CTCGAG			100
	<i>Mec</i> I	CTCGAG			514
	<i>Mla</i> AI	CT1CGAG			471
	<i>Mpu</i> I	CTCGAG			514
	<i>Mrh</i> I	CTCGAG			471
	<i>Msi</i> I	CTCGAG			75,395
	<i>Oco</i> I	CTCGAG			32
	<i>PaeR7</i> I	C ¹ TCGAG	5(6)	NX	601,602
	<i>Pan</i> I	C ¹ TCGAG			148
	<i>Pfj</i> NI	CTCGAG			33
	<i>Pfj</i> WI	CTCGAG			603
	<i>Sal</i> 1974I	CTCGAG			87
	<i>Sau</i> 3239I	C ¹ TCGAG			604,605
	<i>Sca</i> 1827I	CTCGAG			87

Enzyme ¹	Isoschizomers	Recognition ² Sequence	Me ³ site	Commercial ⁴ source	Reference
<i>ScI</i>		CTC!GAG			46
<i>Sci</i> 183II		CTCGAG			87
<i>Scul</i>		CTCGAG			533
<i>Sexl</i>		CTCGAG			533
<i>Sfr</i> 274I		C!TCGAG			8
<i>Sfu</i> 1762I		CTCGAG			87
<i>Sgal</i>		CTCGAG			533
<i>Sgo</i> 1		CTCGAG			533
<i>Sgr</i> 184II		CTCGAG			87
<i>Shy</i> 1766I		CTCGAG			87
<i>Sla</i> I		C!TCGAG			606
<i>Slu</i> I		CTCGAG			534
<i>Spa</i> I		CTCGAG			533
<i>Sph</i> 1719I		CTCGAG			87
<i>Ssp</i> 4I		CTCGAG			55
<i>Sve</i> 194I		CTCGAG			87
<i>Xpa</i> I		C!TCGAG			594
<i>Xba</i> II		R!GATCY		EGMVX	152,321,607
<i>Ait</i> II		RGATCY			262
<i>Ait</i> AI		RGATCY			32
<i>Bst</i> YI		R!GATCY		N	608
<i>Dsa</i> III		R!GATCY			7
<i>Mf</i> II		R!GATCY		AK	609
<i>Tru</i> 201I		R!GATCY			8
<i>Xma</i> III		C!GGCCG	4(5)	B	37,610
<i>Aaa</i> I		C!GGCCG			611
<i>Bst</i> ZI		CGGCCG			80
<i>Eag</i> I		C!GGCCG		N	612
<i>Ecl</i> XI		C!GGCCG		M	613
<i>Eco</i> 52I		C!GGCCG		AEKOU	51,114
<i>Xmn</i> I		GAANNNNNTTC		EGNX	74,614
<i>Asp</i> 700I		GAANNNNNTTC		M	100
<i>Bbv</i> AI		GAANNNNNTTC			615

Type III enzymes

Enzyme	Isoschizomers	Recognition Sequence	Me ³ site	Reference
<i>Eco</i> P1		AGACC	3(6)	638-642
<i>Eco</i> P15I		CAGCAG		643,644
<i>Hinf</i> II		CGAAT		645,646
	<i>Hinc</i> I	CGAAT		647
<i>Sty</i> LTI		CAGAG	4(6)	648

FOOTNOTES

1. * signifies that *Dpn*I and its isoschizomers require the presence of 6-methyladenosine within the recognition sequence GATC.

2. Recognition sequences are given using the standard abbreviations (Eur. J. Biochem. 150: 1-5, 1985) to represent ambiguity:

R = G or A

Y = C or T

M = A or C

K = G or T

S = G or C

W = A or T

H = A or C or T

B = G or T or C

V = G or C or A

D = G or A or T

N = A or C or G or T

3. The site of methylation by the cognate methylase when known is indicated as follows. The first number shows the base within the recognition sequence that is modified. A negative number indicates the complementary strand, numbered from the 5' base of that strand. The number in parentheses indicates the specific methylation involved. (6) = N6-methyladenosine; (5) = 5-methylcytosine; (4) = N4-methylcytosine.

4. Commercial sources of restriction enzymes are abbreviated as follows:

A	Amersham (2/90)
B	BRL (7/89)
E	Stratagene (2/90)
G	Anglian Biotechnology (10/89)
I	IBI (2/90)
K	Takara (1/88)
M	Boehringer Mannheim (2/90)
N	New England Biolabs (3/90)
O	Toyobo (3/90)
P	PL-Pharmacia-LKB (4/89)
R	Promega Biotec (2/90)
S	Sigma (8/89)
U	USB (3/90)
V	Serva (2/90)
X	New York Biolabs (2/90)

5. *BcgI* cleaves on both sides of the recognition sequence: 10 bases 5' to the recognition sequence and 12 bases 3' to it on both strands. Thus the recognition site is excised in a fragment, 34 base pairs long, with 2-base 3'-extensions at each end.

6. *EcoRII* isoschizomers fall into two classes based upon their sensitivity to methylation. *EcoRII* will not cleave when the second cytosine in the recognition sequence is methylated to 5-methylcytosine whereas *MvaI* will cleave such a sequence. Isoschizomers of *EcoRII* that are like *MvaI* are indicated by +.

7. *MboI* isoschizomers fall into two classes based upon their sensitivity to methylation. *MboI* will not cleave when the recognition sequence contains 6-methyladenosine whereas *Sau3AI* will not cleave when its recognition sequence contains 5-methylcytosine. Isoschizomers of *MboI* that are like *Sau3AI* are indicated by +.

8. *TaqII* differs from other restriction enzymes in recognizing two distinct sequences: GACCGA(11/9) and CACCCA(11/9).

Alphabetical listing of Type II restriction enzymes

known recognition sequences

<i>AaaI</i> (<i>XmaIII</i>)	<i>AacI</i> (<i>BamHI</i>)	<i>AaeI</i> (<i>BamHI</i>)	<i>AagI</i> (<i>Clal</i>)
<i>AatI</i> (<i>StuI</i>)	<i>AatII</i>	<i>AbrI</i> (<i>Xhol</i>)	<i>AcaI</i> (<i>AsuII</i>)
<i>AcaII</i> (<i>BamHI</i>)	<i>AcaIII</i> (<i>MstI</i>)	<i>AcaIV</i> (<i>HaeIII</i>)	<i>AccI</i>
<i>AccII</i> (<i>FnuDII</i>)	<i>AccIII</i> (<i>BspMII</i>)	<i>Acc38I</i> (<i>EcoRII</i>)	<i>Acc65I</i> (<i>KpnI</i>)
<i>AccB1I</i> (<i>HgiCI</i>)	<i>AccB7I</i> (<i>PflMI</i>)	<i>AccEBI</i> (<i>BamHI</i>)	<i>Acrl</i> (<i>AvaI</i>)
<i>AcrII</i> (<i>BstEII</i>)	<i>AcyI</i>	<i>AeuI</i> (<i>EcoRII</i>)	<i>AfaI</i> (<i>RsaI</i>)
<i>AfI</i> (<i>Avall</i>)	<i>AfII</i>	<i>AfIII</i>	<i>AgeI</i>
<i>Ahal</i> (<i>CauII</i>)	<i>AhaII</i> (<i>AcyI</i>)	<i>Ahal</i> (<i>III</i>)	<i>AhaB1I</i> (<i>AsuI</i>)
<i>AhaB8I</i> (<i>KpnI</i>)	<i>AhyI</i> (<i>Smal</i>)	<i>AinI</i> (<i>PstI</i>)	<i>AinII</i> (<i>BamHI</i>)
<i>AitI</i> (<i>Eco47III</i>)	<i>AitII</i> (<i>Xhol</i>)	<i>AitAI</i> (<i>Xhol</i>)	<i>AlI</i> (<i>BamHI</i>)
<i>Ali2882I</i> (<i>PstI</i>)	<i>Ali12257I</i> (<i>BamHI</i>)	<i>Ali12258I</i> (<i>BamHI</i>)	<i>AliAJI</i> (<i>PstI</i>)
<i>AluI</i>	<i>AlwI</i> (<i>BinI</i>)	<i>Alw21I</i> (<i>HgiAI</i>)	<i>Alw26I</i> (<i>BsmAI</i>)
<i>Alw44I</i> (<i>Apal</i>)	<i>AlwN1</i>	<i>AlwX1</i> (<i>BbvI</i>)	<i>Amal</i> (<i>NruI</i>)
<i>Ama87I</i> (<i>AvaI</i>)	<i>AmeI</i> (<i>Apal</i>)	<i>AmeII</i> (<i>Nael</i>)	<i>AniMI</i> (<i>Nael</i>)
<i>AocI</i> (<i>SauI</i>)	<i>AocII</i> (<i>Sdul</i>)	<i>AorI</i> (<i>EcoRII</i>)	<i>AosI</i> (<i>MstI</i>)
<i>AosII</i> (<i>AcyI</i>)	<i>AosIII</i> (<i>SacII</i>)	<i>Apal</i>	<i>Apal</i>
<i>Apel</i> (<i>MluI</i>)	<i>ApelI</i> (<i>Nael</i>)	<i>AprI</i> (<i>Nael</i>)	<i>Apul</i> (<i>AsuI</i>)
<i>Apu16I</i> (<i>Clal</i>)	<i>ApI</i> (<i>EcoRII</i>)	<i>AquI</i> (<i>AvaI</i>)	<i>AseI</i> (<i>VspI</i>)
<i>AselII</i> (<i>CauII</i>)	<i>AsnI</i> (<i>VspI</i>)	<i>AspI</i> (<i>Tth111I</i>)	<i>AspII</i> (<i>CauII</i>)
<i>Asp36I</i> (<i>PstI</i>)	<i>Asp47I</i> (<i>Xhol</i>)	<i>Asp52I</i> (<i>HindIII</i>)	<i>Asp78I</i> (<i>StuI</i>)
<i>Asp697I</i> (<i>AvaII</i>)	<i>Asp700I</i> (<i>XmnI</i>)	<i>Asp703I</i> (<i>Xhol</i>)	<i>Asp707I</i> (<i>Clal</i>)
<i>Asp708I</i> (<i>PstI</i>)	<i>Asp713I</i> (<i>PstI</i>)	<i>Asp718I</i> (<i>KpnI</i>)	<i>Asp742I</i> (<i>HaeIII</i>)
<i>Asp745I</i> (<i>AvaII</i>)	<i>Asp748I</i> (<i>HpaII</i>)	<i>Asp763I</i> (<i>Scal</i>)	<i>Asp3065I</i> (<i>HindIII</i>)
<i>AspAI</i> (<i>BstEII</i>)	<i>AspBI</i> (<i>AvaI</i>)	<i>AspBII</i> (<i>AvaII</i>)	<i>AspCI</i> (<i>AvaI</i>)
<i>AspCII</i> (<i>Avall</i>)	<i>AspDI</i> (<i>AvaI</i>)	<i>AspDII</i> (<i>AvaII</i>)	<i>AspHI</i> (<i>HgiAI</i>)
<i>AspNI</i> (<i>NlaIV</i>)	<i>AspTI</i> (<i>PstI</i>)	<i>AspTII</i> (<i>BamHI</i>)	<i>AspTIII</i> (<i>HaeIII</i>)
<i>AsrWI</i> (<i>AcyI</i>)	<i>AsuI</i>	<i>AsuII</i>	<i>AsuIII</i> (<i>AcyI</i>)
<i>AtuII</i> (<i>EcoRII</i>)	<i>AtuII</i> (<i>EcoRII</i>)	<i>AtuBI</i> (<i>EcoRII</i>)	<i>AtuCI</i> (<i>BclI</i>)
<i>Aval</i>	<i>Avall</i>	<i>Avall</i>	<i>AvI</i> (<i>AsuII</i>)
<i>AvII</i> (<i>MstI</i>)	<i>AvrI</i> (<i>AvaI</i>)	<i>AvrII</i>	<i>Axyl</i> (<i>SauI</i>)
<i>BacI</i> (<i>SacII</i>)	<i>Bac36I</i> (<i>AsuI</i>)	<i>Bac465I</i> (<i>SacII</i>)	<i>BadI</i> (<i>Xhol</i>)
<i>Ball</i>	<i>Bal228I</i> (<i>AsuI</i>)	<i>Bal475I</i> (<i>HaeIII</i>)	<i>Bal3006</i> (<i>HaeIII</i>)
<i>BamFI</i> (<i>BamHI</i>)	<i>BamHI</i>	<i>BamKI</i> (<i>BamHI</i>)	<i>BamNI</i> (<i>BamHI</i>)
<i>BamNxI</i> (<i>Avall</i>)	<i>BanI</i> (<i>HgiCI</i>)	<i>BanII</i> (<i>HgiIII</i>)	<i>BanIII</i> (<i>Clal</i>)
<i>BavI</i> (<i>PvuII</i>)	<i>BavAI</i> (<i>PvuII</i>)	<i>BavAI</i> (<i>AsuI</i>)	<i>BbeI</i> (<i>NarI</i>)
<i>BbeAI</i> (<i>NarI</i>)	<i>BbfI</i> (<i>Xhol</i>)	<i>Bbf7411I</i> (<i>BspMII</i>)	<i>Bbl</i> (<i>PstI</i>)
<i>BbiII</i> (<i>AcyI</i>)	<i>BbiII</i> (<i>Xhol</i>)	<i>BbrI</i> (<i>HindIII</i>)	<i>BbrPI</i> (<i>PmaCI</i>)
<i>BbsI</i> (<i>BbvII</i>)	<i>BbuI</i> (<i>SphI</i>)	<i>BbvI</i>	<i>BbvII</i>
<i>Bbv12I</i> (<i>HgiAI</i>)	<i>Bbv16I</i> (<i>BbvII</i>)	<i>BbvAI</i> (<i>XmnI</i>)	<i>BbvII</i>
<i>BbvAIII</i> (<i>BspMII</i>)	<i>BcaI</i> (<i>Hhal</i>)	<i>Bca1259I</i> (<i>BamHI</i>)	<i>Bce22I</i> (<i>AsuI</i>)
<i>Bce71I</i> (<i>HaeIII</i>)	<i>Bce170I</i> (<i>PstI</i>)	<i>Bce243I</i> (<i>MboI</i>)	<i>Bce751I</i> (<i>BamHI</i>)

BceFI (<i>Fnu</i> DII)	BceRI (<i>Fnu</i> DII)	BcefI	BcgI
BcII	BcmI (<i>Clal</i>)	BcnI (<i>Cau</i> II)	BcoI (<i>Ava</i> I)
Bco33I (<i>Hae</i> III)	Bco35I (<i>Gsu</i> I)	Bco10278I (<i>Bam</i> HI)	BcoAI (<i>Pma</i> CI)
BcrI (<i>Nla</i> IV)	BdI (<i>Clal</i>)	BdiSI (<i>Sfe</i> I)	BepI (<i>Fnu</i> DII)
BfI458I (<i>Hae</i> III)	BfH (<i>Afl</i> I)	BgII	BglII
Bim19I (<i>Asu</i> II)	Bim19II (<i>Hae</i> III)	BinI	BinSI (<i>Eco</i> RII)
BinsII (<i>Nar</i> I)	Bka1125I (<i>Sdu</i> I)	Bla7920I (<i>Bsp</i> MII)	BliI (<i>Hae</i> III)
Bli41I (<i>Clal</i>)	Bli49I (<i>Eco</i> 31I)	Bli86I (<i>Clal</i>)	BliRI (<i>Clal</i>)
Bli1I (<i>Xho</i> I)	BluII (<i>Hae</i> III)	Bmal (<i>Pvu</i> I)	BmaAI (<i>Pvu</i> I)
BmaBI (<i>Pvu</i> I)	BmaCII (<i>Pvu</i> I)	BmaDI (<i>Pvu</i> I)	Bme12I (<i>Mbo</i> I)
Bme18I (<i>Ava</i> II)	Bme142I (<i>Hae</i> II)	Bme216I (<i>Ava</i> II)	BmyI (<i>Sdu</i> I)
BnaI (<i>Bam</i> HI)	Bpel (<i>Hind</i> III)	Bpu1 (<i>Hgi</i> III)	Bpu10I
Bpu14I (<i>Asu</i> II)	Bpu95I (<i>Fnu</i> DII)	BsaI (<i>Eco</i> 31I)	BsaAI
BsaBI	BsaJI (<i>Sec</i> I)	BsaPI (<i>Mbo</i> I)	BscI (<i>Clal</i>)
BscAI (<i>Sfa</i> NI)	BseI (<i>Hae</i> III)	BseII (<i>Hpa</i> I)	Bse21I (<i>Sau</i> I)
BseAI (<i>Bsp</i> MII)	BsePI	BshI (<i>Hae</i> III)	BshAI (<i>Hae</i> III)
BshBI (<i>Hae</i> III)	BshCI (<i>Hae</i> III)	BshDI (<i>Hae</i> III)	BshEI (<i>Hae</i> III)
BshFI (<i>Hae</i> III)	BshGI (<i>Eco</i> RII)	BshKI (<i>Asu</i> I)	BsiI
BsiAI (<i>Hae</i> III)	BsiCI (<i>Asu</i> II)	BsiDI (<i>Hae</i> III)	BsiHI (<i>Hae</i> III)
BsiKI (<i>Bst</i> EII)	BsiLI (<i>Eco</i> RII)	BsiMI (<i>Bsp</i> MII)	BsiOI (<i>Bsp</i> MII)
BsiQI (<i>Bcl</i> I)	BsiSI (<i>Hpa</i> II)	BsmI	BsmAI
BsoPI (<i>Bse</i> PI)	Bsp21I (<i>Clal</i>)	Bsp41I (<i>Clal</i>)	Bsp5I (<i>Hpa</i> II)
Bsp6I (<i>Fnu</i> 4HI)	Bsp6II (<i>Eco</i> 57I)	Bsp7I (<i>Cau</i> II)	Bsp8I (<i>Cau</i> II)
Bsp9I (<i>Mbo</i> I)	Bsp12I (<i>Sac</i> II)	Bsp13I (<i>Bsp</i> MII)	Bsp16I (<i>Eco</i> RV)
Bsp17I (<i>Pst</i> I)	Bsp18I (<i>Mbo</i> I)	Bsp19I (<i>Nco</i> I)	Bsp21I (<i>Cfr</i> 10I)
Bsp22I (<i>Gsu</i> I)	Bsp28I (<i>Gsu</i> I)	Bsp29I (<i>Nla</i> IV)	Bsp30I (<i>Bam</i> HI)
Bsp43I (<i>Pst</i> I)	Bsp46I (<i>Bam</i> HI)	Bsp47I (<i>Hpa</i> II)	Bsp48I (<i>Hpa</i> II)
Bsp49I (<i>Mbo</i> I)	Bsp50I (<i>Fnu</i> DII)	Bsp51I (<i>Mbo</i> I)	Bsp52I (<i>Mbo</i> I)
Bsp53I (<i>Scr</i> FI)	Bsp54I (<i>Mbo</i> I)	Bsp55I (<i>Cau</i> II)	Bsp56I (<i>Eco</i> RII)
Bsp57I (<i>Mbo</i> I)	Bsp58I (<i>Mbo</i> I)	Bsp59I (<i>Mbo</i> I)	Bsp60I (<i>Mbo</i> I)
Bsp61I (<i>Mbo</i> I)	Bsp63I (<i>Pst</i> I)	Bsp64I (<i>Mbo</i> I)	Bsp65I (<i>Mbo</i> I)
Bsp66I (<i>Mbo</i> I)	Bsp67I (<i>Mbo</i> I)	Bsp68I (<i>Nru</i> I)	Bsp70I (<i>Fnu</i> DII)
Bsp71I (<i>Hae</i> III)	Bsp72I (<i>Mbo</i> I)	Bsp73I (<i>Scr</i> FI)	Bsp74I (<i>Mbo</i> I)
Bsp76I (<i>Mbo</i> I)	Bsp78I (<i>Pst</i> I)	Bsp81I (<i>Pst</i> I)	Bsp82I (<i>Asu</i> II)
Bsp84I (<i>Clal</i>)	Bsp87I (<i>Pma</i> CI)	Bsp91I (<i>Mbo</i> I)	Bsp92I (<i>Xho</i> I)
Bsp93I (<i>Pst</i> I)	Bsp98I (<i>Bam</i> HI)	Bsp100I (<i>Ava</i> II)	Bsp103I (<i>Eco</i> RII)
Bsp105I (<i>Mbo</i> I)	Bsp106I (<i>Clal</i>)	Bsp107I (<i>Pst</i> I)	Bsp108I (<i>Pst</i> I)
Bsp116I (<i>Hpa</i> II)	Bsp117I (<i>Hgi</i> III)	Bsp119I (<i>Asu</i> II)	Bsp120I (<i>Apal</i>)
Bsp121I (<i>Sph</i> I)	Bsp122I (<i>Mbo</i> I)	Bsp211I (<i>Hae</i> III)	Bsp226I (<i>Hae</i> III)
Bsp423I (<i>Bbv</i> I)	Bsp519I (<i>Hgi</i> III)	Bsp1286I (<i>Sdu</i> I)	Bsp2095I (<i>Mbo</i> I)
BspAI (<i>Mbo</i> I)	BspBII (<i>Asu</i> I)	BspBII (<i>Asu</i> I)	BspBRI (<i>Hae</i> III)
BspCI	BspDII (<i>Clal</i>)	BspJ67I (<i>Cau</i> II)	BspGI
BspHI	BspJ64I (<i>Mbo</i> I)	BspJ106I (<i>Kpn</i> I)	BspJ74I (<i>Gsu</i> I)
BspJ76I (<i>Fnu</i> DII)	BspJ105I (<i>Ava</i> II)	BspVI (<i>Bbv</i> II)	BspMI
BspMII	BspRI (<i>Hae</i> III)	BsrHI (<i>Bse</i> PI)	BspXI (<i>Clal</i>)
BspXII (<i>Bcl</i> I)	BsrI	BssGI (<i>Bsr</i> XI)	BsrPII (<i>Mbo</i> I)
BssI (<i>Nla</i> IV)	BssCI (<i>Hae</i> III)	BssTII (<i>Sty</i> I)	BssGII (<i>Mbo</i> I)
BssHI (<i>Xho</i> I)	BssHII (<i>Bse</i> PI)	Bst1126I (<i>Bam</i> HI)	BstI (<i>Bam</i> HI)
Bst31I (<i>Bst</i> EII)	Bst40I (<i>Hpa</i> II)	BstCI (<i>Hae</i> III)	Bst2464I (<i>Bam</i> HI)
Bst2902I (<i>Bam</i> HI)	Bst8I (<i>Asu</i> II)	BstFI (<i>Hind</i> III)	BstDI (<i>Bst</i> EII)
BstEII	BstEIII (<i>Mbo</i> I)	BstHI (<i>Xho</i> I)	BstGI (<i>Bcl</i> I)
BstGII (<i>Eco</i> RII)	BstMI (<i>Sec</i> I)	BstJI (<i>Hae</i> III)	BstKI (<i>Bcl</i> I)
BstLI (<i>Xho</i> I)	BstQI (<i>Bam</i> HI)	BstNI (<i>Eco</i> RII)	BstOI (<i>Eco</i> RII)
BstPI (<i>Bst</i> EII)	BstUI (<i>Fnu</i> DII)	BstRI (<i>Eco</i> RV)	BstSI (<i>Ava</i> I)
BstTI (<i>Bst</i> XI)	BstXII (<i>Mbo</i> I)	BstVI (<i>Xho</i> I)	BstWI (<i>Eco</i> NI)
BstXI	Bsu15I (<i>Clal</i>)	BstYI (<i>Xho</i> II)	BstZI (<i>Xma</i> III)
Bsu15I (<i>Clal</i>)	Bsu22I (<i>Bsp</i> MII)	Bsu36I (<i>Sau</i> I)	Bsu90I (<i>Bam</i> HI)
Bsu1076I (<i>Hae</i> III)	Bsu1114I (<i>Hae</i> III)	Bsu1192I (<i>Hpa</i> II)	Bsu1192II (<i>Fnu</i> DII)
Bsu1193I (<i>Fnu</i> DII)	Bsu1532I (<i>Fnu</i> DII)	Bsu1854I (<i>Hgi</i> III)	Bsu6633I (<i>Fnu</i> DII)
Bsu8565I (<i>Bam</i> HI)	Bsu8646I (<i>Bam</i> HI)	BsuBI (<i>Pst</i> I)	BsuEII (<i>Fnu</i> DII)
BsuFI (<i>Hpa</i> II)	BsuMI (<i>Xho</i> I)	BsuRI (<i>Hae</i> III)	BtcI (<i>Mbo</i> I)
BteI (<i>Hae</i> III)	BthI (<i>Xho</i> I)	BthII (<i>Bin</i> I)	BrlI (<i>Ava</i> II)
BtuI (<i>Clal</i>)	BvuI (<i>Hgi</i> III)	CacI (<i>Mbo</i> I)	CauI (<i>Ava</i> I)
CauII	CauIII (<i>Pst</i> I)	CauB3I (<i>Bsp</i> MII)	CcrI (<i>Xho</i> I)
CcyI (<i>Mbo</i> I)	Cdi27I (<i>Eco</i> RII)	Cell (<i>Bam</i> HI)	CellI (<i>Espl</i>)
CeqI (<i>Eco</i> RV)	CflI (<i>Pst</i> I)	CfoI (<i>Hha</i> I)	CfrI
Cfr4I (<i>Asu</i> I)	Cfr5I (<i>Eco</i> RII)	Cfr6I (<i>Pvu</i> II)	Cfr7I (<i>Bst</i> EII)
Cfr8I (<i>Asu</i> I)	Cfr9I (<i>Sma</i> I)	Cfr10I	Cfr11I (<i>Eco</i> RII)
Cfr13I (<i>Asu</i> I)	Cfr14I (<i>Cfr</i> I)	Cfr19I (<i>Bst</i> EII)	Cfr20I (<i>Eco</i> RII)

Cfr22I (EcoRII)	Cfr23I (AsuI)	Cfr24I (EcoRII)	Cfr25I (EcoRII)
Cfr27I (EcoRII)	Cfr28I (EcoRII)	Cfr29I (EcoRII)	Cfr30I (EcoRII)
Cfr31I (EcoRII)	Cfr32I (HindIII)	Cfr33I (AsuI)	Cfr35I (EcoRII)
Cfr37I (SacII)	Cfr38I (CfrI)	Cfr39I (CfrI)	Cfr40I (CfrI)
Cfr41I (SacII)	Cfr42I (SacII)	Cfr43I (SacII)	Cfr45I (AsuI)
Cfr45II (SacII)	Cfr46I (AsuI)	Cfr47I (AsuI)	Cfr48I (HgiJII)
Cfr51I (PvuI)	Cfr52I (AsuI)	Cfr54I (AsuI)	CfrA4I (PstI)
CfrJ4I (SmaI)	CfrNI (AsuI)	CfrS37I (EcoRII)	Cful (DpnI)
CfuII (PstI)	ChuI (HindIII)	ChuII (HindII)	ChyI (StuI)
Cin1467I (MboI)	CjaI (XbaI)	Clal	ClcI (PstI)
ClcII (MstI)	CliI (Avall)	CliII (MstI)	ClmI (HaeIII)
ClmII (Avall)	CtlI (HaeIII)	CpaI (MboI)	Cpa1150I (FnuDII)
CpaAI (FnuDII)	CpeI (BclI)	CpfI (MboI)	CpoI (RsrII)
CscI (SacII)	CspI (RsrII)	Csp2I (HaeIII)	Csp4I (Clal)
Csp5I (MboI)	Csp6I (RsaI)	Csp45I (AsuII)	Csp1470I (Hhal)
CstI (PstI)	Cte1179I (MboI)	Cte1180 (MboI)	CthI (BclI)
ChII (EcoRII)	CtyI (MboI)	CviAI (MboI)	CviBI (HinfI)
CviCI (HinfI)	CviDI (HinfI)	CviEI (HinfI)	CviFI (HinfI)
CviGI (HinfI)	CviHI (MboI)	CviJI	CviKI (CviJI)
CviLI (CviJI)	CviMI (CviJI)	CviNI (CviJI)	CviOI (CviJI)
CviQI (RsaI)	CvnI (SauI)	DdeI	DdeII (XbaI)
DdsI (BamHI)	DpnI	DpnII (MboI)	DraI (AhaIII)
DraII	DraIII	DrdI	DrdII
DrdIII (PvuI)	DrdAI (SacII)	DrdBI (SacII)	DrdCI (SacII)
DrdDI (XbaI)	DrdEI (SacII)	DrdFI (SacII)	DsaI
DsaII (HaeIII)	DsaIII (XbaI)	DsaIV (Avall)	DsaV (ScrFI)
DsaVI (AccI)	Dsp1I (SacII)	EaeI (CfrI)	Eae46I (SacII)
EaePI (PstI)	EagI (XbaIII)	EagKI (EcoRII)	EagMI (Avall)
Earl (Ksp632I)	Ecal (BstEII)	EcaII (EcoRII)	EccI (SacII)
EciI	EciAI (SnaBI)	EciBI (CfrI)	EciCI (SauI)
EciDI (CauII)	EciEI (ApaI)	EclI (PvuII)	EclII (EcoRII)
Ect28I (SacII)	Ecl37I (SacII)	Ecl66I (EcoRII)	Ecl77I (PstI)
Ecl133I (PstI)	Ecl136I (EcoRII)	Ecl136II (SacI)	Ecl137I (SacI)
Ecl137II (EcoRII)	Ecl593I (PstI)	EclJ1I (PvuI)	EclRI (SmaI)
EclS39I (EcoRII)	EclXI (XbaIII)	EcoVIII (HindIII)	Eco24I (HgiJII)
Eco25I (HgiJII)	Eco26I (HgiJII)	Eco31I	Eco32I (EcoRV)
Eco35I (HgiJII)	Eco38I (EcoRII)	Eco39I (AsuI)	Eco40I (EcoRII)
Eco41I (EcoRII)	Eco42I (Eco31I)	Eco43I (ScrFI)	Eco47I (Avall)
Eco47II (AsuI)	Eco47III	Eco48I (PstI)	Eco49I (PstI)
Eco50I (HgiCI)	Eco51I (Eco31I)	Eco51II (ScrFI)	Eco52I (XbaIII)
Eco55I (SacII)	Eco56I (NaeI)	Eco57I	Eco60I (EcoRII)
Eco61I (EcoRII)	Eco64I (HgiCI)	Eco65I (HindIII)	Eco67I (EcoRII)
Eco68I (HgiJII)	Eco70I (EcoRII)	Eco71I (EcoRII)	Eco72I (PmaCI)
Eco76I (SauI)	Eco78I (Narl)	Eco80I (ScrFI)	Eco81I (SauI)
Eco82I (EcoRI)	Eco83I (PstI)	Eco85I (ScrFI)	Eco88I (Avall)
Eco90I (CfrI)	Eco91I (BstEII)	Eco92I (SacII)	Eco93I (ScrFI)
Eco95I (Eco31I)	Eco96I (SacII)	Eco97I (Eco31I)	Eco98I (HindIII)
Eco99I (SacII)	Eco100I (SacII)	Eco101I (Eco31I)	Eco104I (SacII)
Eco105I (SnaBI)	Eco113I (HgiJII)	Eco115I (SauI)	Eco118I (SauI)
Eco120I (Eco31I)	Eco121I (CauII)	Eco125I (Eco57I)	Eco127I (Eco31I)
Eco128I (EcoRII)	Eco129I (Eco31I)	Eco130I (Styl)	Eco134I (SacII)
Eco135I (SacII)	Eco143I (BsePI)	Eco147I (Stul)	Eco149I (KpnI)
Eco153I (ScrFI)	Eco155I (Eco31I)	Eco156I (Eco31I)	Eco157I (Eco31I)
Eco158I (SacII)	Eco158II (SnaBI)	Eco159I (EcoRI)	Eco161I (PstI)
Eco162I (Eco31I)	Eco164I (CfrI)	Eco167I (PstI)	Eco168I (HgiCI)
Eco169I (HgiCI)	Eco170I (EcoRII)	Eco171I (HgiCI)	Eco173I (HgiCI)
Eco178I (EcoRV)	Eco179I (CauII)	Eco180I (HgiJII)	Eco182I (SacII)
Eco185I (Eco31I)	Eco188I (HindIII)	Eco190I (CauII)	Eco191I (Eco31I)
Eco193I (EcoRII)	Eco195I (HgiCI)	Eco196I (SacII)	Eco196II (AsuI)
Eco200I (ScrFI)	Eco201I (AsuI)	Eco203I (Eco31I)	Eco204I (Eco31I)
Eco205I (Eco31I)	Eco206I (EcoRII)	Eco207I (EcoRII)	Eco208I (SacII)
Eco208II (Styl)	Eco211I (HgiJII)	Eco215I (HgiJII)	Eco216I (HgiJII)
Eco217I (Eco31I)	Eco225I (Eco31I)	Eco228I (EcoRI)	Eco231I (HindIII)
Eco232I (HgiJII)	Eco233I (Eco31I)	Eco237I (EcoRI)	Eco239I (Eco31I)
Eco240I (Eco31I)	Eco244I (Eco31I)	Eco246I (Eco31I)	Eco247I (Eco31I)
Eco252I (EcoRI)	EcoA4I (Eco31I)	EcoHI (CfrI)	EcoICRI (SacI)
EcoNI	EcoO65I (BstEII)	EcoO109I (DraII)	EcoRI
EcoRII	EcoRV	EcoT14I (Styl)	EcoT22I (Avall)
EcoT38I (HgiJII)	EcoT88I (HgiJII)	EcoT93I (HgiJII)	EcoT95I (HgiJII)

EcoT104I (StyI)	<i>EheI</i> (<i>NarI</i>)	<i>ErhB9I</i> (<i>PvuI</i>)	<i>ErhB9II</i> (<i>StyI</i>)
<i>ErpI</i> (<i>AvalI</i>)	<i>EspI</i>	<i>Esp11</i> (<i>HgiCI</i>)	<i>Esp2I</i> (<i>EcoRII</i>)
<i>Esp3I</i>	<i>Esp4I</i> (<i>AfII</i>)	<i>Esp5I</i> (<i>NaeI</i>)	<i>Esp5II</i> (<i>PstI</i>)
<i>Esp6I</i> (<i>HgiCI</i>)	<i>Esp7I</i> (<i>BsePI</i>)	<i>Esp8I</i> (<i>BsePI</i>)	<i>Esp9I</i> (<i>HgiCI</i>)
<i>Esp10I</i> (<i>HgiCI</i>)	<i>Esp11I</i> (<i>HgiCI</i>)	<i>Esp12I</i> (<i>HgiCI</i>)	<i>Esp13I</i> (<i>HgiCI</i>)
<i>Esp14I</i> (<i>HgiCI</i>)	<i>Esp15I</i> (<i>HgiCI</i>)	<i>Esp19I</i> (<i>KpnI</i>)	<i>Esp22I</i> (<i>HgiCI</i>)
<i>Esp14II</i> (<i>PstI</i>)	<i>FauI</i>	<i>FbaI</i> (<i>BclI</i>)	<i>FblI</i> (<i>AacI</i>)
<i>FbrI</i> (<i>Fnu4HI</i>)	<i>FdiI</i> (<i>AvalI</i>)	<i>FdiII</i> (<i>MstI</i>)	<i>FinI</i>
<i>FinII</i> (<i>HpaII</i>)	<i>FinSI</i> (<i>HaeIII</i>)	<i>Fnu4HI</i>	<i>FnuAI</i> (<i>HinfI</i>)
<i>FnuAII</i> (<i>MboI</i>)	<i>FnuCI</i> (<i>MboI</i>)	<i>FnuDI</i> (<i>HaeIII</i>)	<i>FnuDII</i>
<i>FnuDIII</i> (<i>Hhal</i>)	<i>FnuEI</i> (<i>MboI</i>)	<i>FokI</i>	<i>Fscl</i> (<i>SacII</i>)
<i>Fsel</i>	<i>FspI</i> (<i>Eco57I</i>)	<i>FspI</i> (<i>MstI</i>)	<i>FspII</i> (<i>AsuII</i>)
<i>Fsp1604I</i> (<i>EcoRII</i>)	<i>FspMI</i> (<i>FnuDII</i>)	<i>FspMSI</i> (<i>AvalII</i>)	<i>FsuI</i> (<i>Tth111I</i>)
<i>GalI</i> (<i>SacII</i>)	<i>GceI</i> (<i>SacII</i>)	<i>GceGLI</i> (<i>SacII</i>)	<i>GdlI</i> (<i>StuI</i>)
<i>GdII</i>	<i>GdI</i> (<i>BamHI</i>)	<i>GinI</i> (<i>BamHI</i>)	<i>GoxI</i> (<i>BamHI</i>)
<i>Gsel</i> (<i>AsuI</i>)	<i>GseII</i> (<i>PstI</i>)	<i>GseIII</i> (<i>BamHI</i>)	<i>GspI</i> (<i>PvuII</i>)
<i>GspAI</i> (<i>AvaII</i>)	<i>GspAII</i> (<i>MstI</i>)	<i>GsuI</i>	<i>Hacl</i> (<i>MboI</i>)
<i>HaeI</i>	<i>HaeII</i>	<i>HaeIII</i>	<i>HalB6I</i> (<i>EcoRI</i>)
<i>HalB6II</i> (<i>PstI</i>)	<i>HapII</i> (<i>HpaII</i>)	<i>Hgal</i>	<i>HgI</i> (<i>Acyl</i>)
<i>HgiAI</i>	<i>HgiBI</i> (<i>AvalI</i>)	<i>HgiCI</i>	<i>HgiCII</i> (<i>AvalII</i>)
<i>HgiCIII</i> (<i>SalI</i>)	<i>HgiDI</i> (<i>Acyl</i>)	<i>HgiDII</i> (<i>SalI</i>)	<i>HgiEI</i> (<i>AvaII</i>)
<i>HgiEII</i>	<i>HgiGI</i> (<i>Acyl</i>)	<i>HgiHI</i> (<i>HgiCI</i>)	<i>HgiHII</i> (<i>Acyl</i>)
<i>HgiHIII</i> (<i>AvaII</i>)	<i>HgiJI</i> (<i>AvalII</i>)	<i>HgiJII</i>	<i>HgiS21I</i> (<i>CauII</i>)
<i>HgiS22I</i> (<i>CauII</i>)	<i>Hhal</i>	<i>HhalI</i> (<i>HinfI</i>)	<i>HhgI</i> (<i>HaeIII</i>)
<i>Hin1I</i> (<i>Acyl</i>)	<i>Hin1II</i> (<i>NlaIII</i>)	<i>Hin2I</i> (<i>HpaII</i>)	<i>Hin3I</i> (<i>CauII</i>)
<i>Hin5I</i> (<i>HpaII</i>)	<i>Hin5II</i> (<i>AsuI</i>)	<i>Hin5III</i> (<i>HindIII</i>)	<i>Hin6I</i> (<i>Hhal</i>)
<i>Hin7I</i> (<i>Hhal</i>)	<i>Hin8I</i> (<i>Acyl</i>)	<i>Hin8II</i> (<i>NlaIII</i>)	<i>Hin173I</i> (<i>HindIII</i>)
<i>Hin1056I</i> (<i>FnuDII</i>)	<i>Hin1076III</i> (<i>HindIII</i>)	<i>Hin1160II</i> (<i>HindII</i>)	<i>Hin116III</i> (<i>HindII</i>)
<i>HinGII</i> (<i>Hhal</i>)	<i>HinGII</i> (<i>FokI</i>)	<i>HinHI</i> (<i>Haell</i>)	<i>HinJCI</i> (<i>HindII</i>)
<i>HinJCI</i> (<i>HindIII</i>)	<i>HinPII</i> (<i>Hhal</i>)	<i>HinSII</i> (<i>Hhal</i>)	<i>HinS2I</i> (<i>Hhal</i>)
<i>HinbIII</i> (<i>HindIII</i>)	<i>HincII</i> (<i>HindIII</i>)	<i>HindII</i>	<i>HindIII</i>
<i>Hinfl</i>	<i>HinfII</i> (<i>HindIII</i>)	<i>Hjal</i> (<i>EcoRV</i>)	<i>HpaI</i>
<i>HpaII</i>	<i>HphI</i>	<i>Hsp2I</i> (<i>AvaII</i>)	<i>HsuI</i> (<i>HindIII</i>)
<i>IspI</i> (<i>Fnu4HI</i>)	<i>KoxI</i> (<i>BstEII</i>)	<i>KoxII</i> (<i>HgiJII</i>)	<i>Kox165I</i> (<i>EcoRII</i>)
<i>KoyI</i> (<i>SalI</i>)	<i>KpnI</i>	<i>Kpn2I</i> (<i>BspMII</i>)	<i>Kpn10I</i> (<i>EcoRII</i>)
<i>Kpn12I</i> (<i>PstI</i>)	<i>Kpn13I</i> (<i>EcoRII</i>)	<i>Kpn14I</i> (<i>EcoRII</i>)	<i>Kpn16I</i> (<i>EcoRII</i>)
<i>Kpn30I</i> (<i>BsePI</i>)	<i>KpnK14I</i> (<i>KpnI</i>)	<i>KspI</i> (<i>SacII</i>)	<i>Ksp22I</i> (<i>BclI</i>)
<i>Ksp632I</i>	<i>Kzo9I</i> (<i>MboI</i>)	<i>Kzo49I</i> (<i>AvalI</i>)	<i>Lmu60I</i> (<i>SauI</i>)
<i>LpI</i> (<i>Clal</i>)	<i>LspI</i> (<i>AsuII</i>)	<i>Mael</i>	<i>MaeII</i>
<i>MaeIII</i>	<i>MamI</i> (<i>BsaBI</i>)	<i>Maul</i> (<i>PstI</i>)	<i>MavI</i> (<i>XhoI</i>)
<i>MboI</i>	<i>MboII</i>	<i>Mcal</i> (<i>Xhol</i>)	<i>MchI</i> (<i>NarI</i>)
<i>Mcrl</i>	<i>MecI</i> (<i>Xhol</i>)	<i>Meul</i> (<i>MboI</i>)	<i>MfeI</i>
<i>MfII</i> (<i>XhoII</i>)	<i>MfjI</i> (<i>AvaII</i>)	<i>MisI</i> (<i>NaeI</i>)	<i>MjaI</i> (<i>MaeI</i>)
<i>MjaiI</i> (<i>AsuI</i>)	<i>MklI</i> (<i>HindIII</i>)	<i>MkrI</i> (<i>PstI</i>)	<i>MkrAI</i> (<i>MboI</i>)
<i>MlaI</i> (<i>AsuI</i>)	<i>MlaAI</i> (<i>Xhol</i>)	<i>MleI</i> (<i>BamHI</i>)	<i>MliI</i> (<i>AvaII</i>)
<i>MluI</i> (<i>AluI</i>)	<i>MluI</i>	<i>Mlu23I</i> (<i>BamHI</i>)	<i>Mlu2300I</i> (<i>EcoRII</i>)
<i>MluB2I</i> (<i>NruI</i>)	<i>MlyI</i>	<i>Mly113I</i> (<i>NarI</i>)	<i>MmeI</i>
<i>MmeII</i> (<i>MboI</i>)	<i>MnlI</i> (<i>HaeIII</i>)	<i>MnlII</i> (<i>HpaII</i>)	<i>MnI</i>
<i>MnnI</i> (<i>HindIII</i>)	<i>MnnII</i> (<i>HaelIII</i>)	<i>MnnIV</i> (<i>Hhal</i>)	<i>MnoI</i> (<i>HpaII</i>)
<i>MnoIII</i> (<i>MboI</i>)	<i>MosI</i> (<i>MboI</i>)	<i>MphI</i> (<i>EcoRII</i>)	<i>MpuI</i> (<i>Xhol</i>)
<i>MraI</i> (<i>SacII</i>)	<i>MrhI</i> (<i>Xhol</i>)	<i>Mrol</i> (<i>BspMII</i>)	<i>MscI</i> (<i>BalI</i>)
<i>MseI</i>	<i>MsiI</i> (<i>Xhol</i>)	<i>MspI</i> (<i>HpaII</i>)	<i>Msp20I</i> (<i>BalI</i>)
<i>Msp24I</i> (<i>AsuI</i>)	<i>Msp67I</i> (<i>ScrFI</i>)	<i>Msp67II</i> (<i>MboI</i>)	<i>MspAI</i> (<i>AvaII</i>)
<i>MspA1I</i> (<i>NspBII</i>)	<i>MspB1</i> (<i>MboI</i>)	<i>MspB4I</i> (<i>HgiCI</i>)	<i>MspYI</i> (<i>BsaAI</i>)
<i>MstI</i>	<i>MstII</i> (<i>SauI</i>)	<i>MihI</i> (<i>MboI</i>)	<i>Mth1047I</i> (<i>MboI</i>)
<i>MthAI</i> (<i>MboI</i>)	<i>MthTI</i> (<i>AsuI</i>)	<i>MvaI</i> (<i>EcoRII</i>)	<i>MvaAI</i> (<i>FnuDII</i>)
<i>MvnI</i> (<i>FnuDII</i>)	<i>MwoI</i>	<i>MzI</i> (<i>PvuII</i>)	<i>NaeI</i>
<i>NamI</i> (<i>NarI</i>)	<i>NanI</i> (<i>EcoRV</i>)	<i>NanII</i> (<i>DpnI</i>)	<i>NarI</i>
<i>NasI</i> (<i>PstI</i>)	<i>NasBI</i> (<i>BamHI</i>)	<i>NasSI</i> (<i>SacII</i>)	<i>NasWI</i> (<i>NaeI</i>)
<i>NbaI</i> (<i>NaeI</i>)	<i>NbI</i> (<i>PvuI</i>)	<i>NbRI</i> (<i>NaeI</i>)	<i>NcaI</i> (<i>HinfI</i>)
<i>NciI</i> (<i>CauII</i>)	<i>NcoI</i>	<i>NcuI</i> (<i>MboII</i>)	<i>NdaI</i> (<i>NarI</i>)
<i>NdeI</i>	<i>NdeII</i> (<i>MboI</i>)	<i>NfII</i> (<i>MboI</i>)	<i>NfIAI</i> (<i>EcoRV</i>)
<i>NfIAII</i> (<i>MboI</i>)	<i>NfIBI</i> (<i>MboI</i>)	<i>NgbI</i> (<i>PstI</i>)	<i>NgoI</i> (<i>HaeII</i>)
<i>NgoII</i> (<i>HaeIII</i>)	<i>NgoIII</i> (<i>SacII</i>)	<i>NgoAIII</i> (<i>SacII</i>)	<i>NgoAIV</i> (<i>NaeI</i>)
<i>NgoBI</i> (<i>HphI</i>)	<i>NgoDI</i> (<i>SacII</i>)	<i>NgoDIII</i> (<i>DpnI</i>)	<i>NgoMI</i> (<i>NaeI</i>)
<i>NgoPII</i> (<i>HaeIII</i>)	<i>NgoPIII</i> (<i>SacII</i>)	<i>NgoSI</i> (<i>HaeIII</i>)	<i>NheI</i>
<i>NlaI</i> (<i>HaeIII</i>)	<i>NlaII</i> (<i>MboI</i>)	<i>NlaIII</i>	<i>NlaIV</i>
<i>NlaDI</i> (<i>MboI</i>)	<i>NlaDII</i> (<i>AsuI</i>)	<i>NlaDIII</i> (<i>SacII</i>)	<i>NlaSI</i> (<i>SacII</i>)
<i>NlaSII</i> (<i>Acyl</i>)	<i>NlI</i> (<i>Aval</i>)	<i>NlIII</i> (<i>AvaII</i>)	<i>NmeCI</i> (<i>MboI</i>)

<i>NmeRI</i> (<i>Pvu</i> II)	<i>NmuI</i> (<i>Kpn</i> I)	<i>NmuI</i> (<i>Nae</i> I)	<i>NmuAI</i> (<i>Ava</i> I)
<i>NmuAII</i> (<i>Ava</i> II)	<i>NmuDI</i> (<i>Dpn</i> I)	<i>NmuEI</i> (<i>Dpn</i> I)	<i>NmuEII</i> (<i>Asu</i> I)
<i>NmuFI</i> (<i>Nae</i> I)	<i>NmuSI</i> (<i>Asu</i> I)	<i>NoeI</i> (<i>Pst</i> I)	<i>NopI</i> (<i>Sal</i> I)
<i>NotI</i>	<i>NovII</i> (<i>Hinf</i> I)	<i>NphI</i> (<i>Mbo</i> I)	<i>NruI</i>
<i>NsiI</i> (<i>Ava</i> III)	<i>NsiAI</i> (<i>Mbo</i> I)	<i>NsiCI</i> (<i>EcoRV</i>)	<i>NsiHI</i> (<i>Hinf</i> I)
<i>NspI</i>	<i>NspII</i> (<i>Sdul</i>)	<i>NspIII</i> (<i>Ava</i> I)	<i>NspIV</i> (<i>Asu</i> I)
<i>NspV</i> (<i>Asu</i> II)	<i>NspAI</i> (<i>Mbo</i> I)	<i>NspBI</i> (<i>Asu</i> II)	<i>NspBII</i>
<i>NspDI</i> (<i>Ava</i> I)	<i>NspDII</i> (<i>Ava</i> II)	<i>NspEI</i> (<i>Ava</i> I)	<i>NspFI</i> (<i>Asu</i> II)
<i>NspGI</i> (<i>Ava</i> II)	<i>NspHI</i> (<i>Nsp</i> I)	<i>NspHII</i> (<i>Ava</i> II)	<i>NspHIII</i> (<i>Mst</i> I)
<i>NspJI</i> (<i>Asu</i> II)	<i>NspKI</i> (<i>Ava</i> II)	<i>NspLI</i> (<i>Mst</i> I)	<i>NspLII</i> (<i>Asu</i> I)
<i>NspMI</i> (<i>Mst</i> I)	<i>NspMACI</i> (<i>Bg</i> /II)	<i>NspSAI</i> (<i>Ava</i> I)	<i>NspSAII</i> (<i>Bst</i> EII)
<i>NspSAIII</i> (<i>Nco</i> I)	<i>NspSAIV</i> (<i>Bam</i> HI)	<i>NspWI</i> (<i>Nae</i> I)	<i>NsuI</i> (<i>Mbo</i> I)
<i>NsuDI</i> (<i>Dpn</i> I)	<i>NtaI</i> (<i>Tth</i> 111I)	<i>NtaSI</i> (<i>Sst</i> I)	<i>NtaSII</i> (<i>Nae</i> I)
<i>NunII</i> (<i>Nar</i> I)	<i>OcoI</i> (<i>Xho</i> I)	<i>OtuI</i> (<i>Alu</i> I)	<i>OtuNI</i> (<i>Alu</i> I)
<i>OxaI</i> (<i>Alu</i> I)	<i>OxaNI</i> (<i>Sau</i> I)	<i>PaeI</i> (<i>Sph</i> I)	<i>Pae177I</i> (<i>Bam</i> HI)
<i>Pae181I</i> (<i>Cau</i> II)	<i>PaeAI</i> (<i>Sac</i> II)	<i>PaeBI</i> (<i>Sma</i> I)	<i>PaeR7I</i> (<i>Xho</i> I)
<i>PaiI</i> (<i>Hae</i> III)	<i>PaiI</i> (<i>Hae</i> III)	<i>PanI</i> (<i>Xho</i> I)	<i>Pde12I</i> (<i>Asu</i> I)
<i>Pde133I</i> (<i>Hae</i> III)	<i>Pde137I</i> (<i>Hpa</i> I)	<i>Pet9403I</i> (<i>Mbo</i> I)	<i>PfaI</i> (<i>Mbo</i> I)
<i>PflAI</i> (<i>Fnu</i> DII)	<i>PflMI</i>	<i>PflNI</i> (<i>Xho</i> I)	<i>PftWI</i> (<i>Xho</i> I)
<i>PfuI</i> (<i>Spi</i> I)	<i>PgII</i> (<i>Nae</i> I)	<i>PgIB4I</i> (<i>Cla</i> I)	<i>PleI</i>
<i>Ple19I</i> (<i>Pvu</i> I)	<i>PmaI</i> (<i>Pst</i> I)	<i>Pma44I</i> (<i>Pst</i> I)	<i>PmaCI</i>
<i>Pme55I</i> (<i>Sst</i> I)	<i>PmI</i> (<i>Pma</i> Cl)	<i>PmyI</i> (<i>Pst</i> I)	<i>PovI</i> (<i>Bcl</i> I)
<i>PpaI</i> (<i>Eco</i> 31I)	<i>Pph3215I</i> (<i>Hgi</i> AI)	<i>PpuI</i> (<i>Hae</i> III)	<i>PpuMI</i>
<i>PseI</i> (<i>Asu</i> I)	<i>PshAI</i>	<i>PspI</i> (<i>Asu</i> I)	<i>Psp61I</i> (<i>Nae</i> I)
<i>PssI</i> (<i>Dra</i> II)	<i>PstI</i>	<i>Psu161I</i> (<i>Pvu</i> I)	<i>PvuI</i>
<i>PvuII</i>	<i>PvuHKUI</i> (<i>Pvu</i> II)	<i>RflFI</i> (<i>Sal</i> I)	<i>RheI</i> (<i>Sal</i> I)
<i>RhpI</i> (<i>Sal</i> I)	<i>RhsI</i> (<i>Bam</i> HI)	<i>RleAI</i>	<i>RluI</i> (<i>Nae</i> I)
<i>Rlu1I</i> (<i>Mbo</i> I)	<i>Rlu3I</i> (<i>Nla</i> IV)	<i>Rlu4I</i> (<i>Bam</i> HI)	<i>RrhI</i> (<i>Sal</i> I)
<i>RroI</i> (<i>Sal</i> I)	<i>RsaI</i>	<i>RshI</i> (<i>Pvu</i> I)	<i>RshII</i> (<i>Cau</i> II)
<i>RspI</i> (<i>Pvu</i> I)	<i>RspXI</i> (<i>Bsp</i> HI)	<i>RsrI</i> (<i>Eco</i> RI)	<i>RsrII</i>
<i>SaaI</i> (<i>Sac</i> II)	<i>SabI</i> (<i>Sac</i> II)	<i>SacI</i>	<i>SacII</i>
<i>SacAI</i> (<i>Nae</i> I)	<i>SakI</i> (<i>Sac</i> II)	<i>Sall</i>	<i>Sal1974I</i> (<i>Xho</i> I)
<i>SalAI</i> (<i>Mbo</i> I)	<i>SalCI</i> (<i>Nae</i> I)	<i>SalDI</i> (<i>Nru</i> I)	<i>SalHI</i> (<i>Mbo</i> I)
<i>SalPI</i> (<i>Pst</i> I)	<i>SaoI</i> (<i>Nae</i> I)	<i>SalI</i> (<i>Sst</i> I)	<i>SalI</i>
<i>Sau10I</i> (<i>Kpn</i> I)	<i>Sau12I</i> (<i>Eco</i> 31I)	<i>Sau96I</i> (<i>Asu</i> I)	<i>Sau3239I</i> (<i>Xho</i> I)
<i>Sau6782I</i> (<i>Mbo</i> I)	<i>SauAI</i> (<i>Nae</i> I)	<i>Sau3AI</i> (<i>Mbo</i> I)	<i>SauBI</i> (<i>Asu</i> I)
<i>SauBMKJ</i> (<i>Nae</i> I)	<i>SauCI</i> (<i>Mbo</i> I)	<i>SauDI</i> (<i>Mbo</i> I)	<i>SauEI</i> (<i>Mbo</i> I)
<i>SauFI</i> (<i>Mbo</i> I)	<i>SauGI</i> (<i>Mbo</i> I)	<i>SauMI</i> (<i>Mbo</i> I)	<i>SbaI</i> (<i>Pvu</i> II)
<i>SblAI</i> (<i>Sty</i> I)	<i>SblBI</i> (<i>Sty</i> I)	<i>SblCI</i> (<i>Sty</i> I)	<i>SboI</i> (<i>Sac</i> II)
<i>Sbo13I</i> (<i>Nru</i> I)	<i>Scal</i>	<i>Sca1827I</i> (<i>Xho</i> I)	<i>SceI</i> (<i>Fnu</i> DII)
<i>Scg2I</i> (<i>Eco</i> RII)	<i>Scil</i> (<i>Xho</i> I)	<i>Sci1831I</i> (<i>Xho</i> I)	<i>SciAI</i> (<i>Bst</i> EII)
<i>SciAII</i> (<i>Pvu</i> II)	<i>SciNI</i> (<i>Hha</i> I)	<i>SciI</i> (<i>Sac</i> I)	<i>ScrFI</i>
<i>ScuI</i> (<i>Xho</i> I)	<i>SduI</i>	<i>SdyI</i> (<i>Asu</i> I)	<i>SecI</i>
<i>SecII</i> (<i>Hpa</i> II)	<i>SecIII</i> (<i>Sau</i> I)	<i>SexI</i> (<i>Xho</i> I)	<i>SfaI</i> (<i>Hae</i> III)
<i>SfaGUI</i> (<i>Hpa</i> II)	<i>SfaNI</i>	<i>SfeI</i>	<i>SfiI</i>
<i>SfiI</i> (<i>Pst</i> I)	<i>Sfi2aI</i> (<i>Eco</i> RII)	<i>Sfi2bI</i> (<i>Eco</i> RII)	<i>SfnI</i> (<i>Ava</i> II)
<i>SfoI</i> (<i>Nar</i> I)	<i>SfrI</i> (<i>Sac</i> II)	<i>Sfr274I</i> (<i>Xho</i> I)	<i>Sfr303I</i> (<i>Sac</i> II)
<i>Sfr382I</i> (<i>Sac</i> II)	<i>SfuI</i> (<i>Asu</i> II)	<i>Sfu1762I</i> (<i>Xho</i> I)	<i>Sgal</i> (<i>Xho</i> I)
<i>Sgh1835I</i> (<i>Av</i> II)	<i>SgoI</i> (<i>Xho</i> I)	<i>Sgr20I</i> (<i>Eco</i> RII)	<i>Sgr1839I</i> (<i>Asu</i> II)
<i>Sgr1841I</i> (<i>Xho</i> I)	<i>SgrAI</i>	<i>ShyI</i> (<i>Sac</i> II)	<i>Shy1766I</i> (<i>Xho</i> I)
<i>SinI</i> (<i>Av</i> II)	<i>SinAI</i> (<i>Av</i> II)	<i>SinBI</i> (<i>Av</i> II)	<i>SinCI</i> (<i>Av</i> II)
<i>SinDI</i> (<i>Av</i> II)	<i>SinEI</i> (<i>Av</i> II)	<i>SinFI</i> (<i>Av</i> II)	<i>SinGI</i> (<i>Av</i> II)
<i>SinHI</i> (<i>Av</i> II)	<i>SinJI</i> (<i>Av</i> II)	<i>SinMI</i> (<i>Mbo</i> I)	<i>SkaI</i> (<i>Nae</i> I)
<i>SkaII</i> (<i>Pst</i> I)	<i>Slal</i> (<i>Xho</i> I)	<i>SleI</i> (<i>Eco</i> RII)	<i>SluI</i> (<i>Xho</i> I)
<i>Slu1777I</i> (<i>Nae</i> I)	<i>SmaI</i>	<i>SmaAI</i> (<i>Spf</i> I)	<i>SmaII</i> (<i>Tth</i> 111I)
<i>SmaAIII</i> (<i>Pvu</i> I)	<i>SmaAIV</i> (<i>Pvu</i> II)	<i>SnaI</i>	<i>Sna3286I</i> (<i>Nru</i> I)
<i>SnaBI</i>	<i>SnoI</i> (<i>Apa</i> L)	<i>Sol3335I</i> (<i>Pvu</i> II)	<i>SpaI</i> (<i>Xho</i> I)
<i>SpaXI</i> (<i>Spf</i> I)	<i>Spel</i>	<i>SphI</i>	<i>Sph1719I</i> (<i>Xho</i> I)
<i>SpI</i>	<i>SpII</i>	<i>SpIII</i> (<i>Tth</i> 111I)	<i>SpI</i> (<i>Hae</i> III)
<i>SpI</i> (<i>Spf</i> I)	<i>SpI</i> (<i>Tth</i> 111I)	<i>SpI</i> (<i>Av</i> II)	<i>SpI</i> (<i>Pvu</i> II)
<i>SpoI</i> (<i>Nru</i> I)	<i>Ssel</i> (<i>Bcl</i> I)	<i>SseII</i> (<i>Sac</i> II)	<i>SshAI</i> (<i>Sau</i> I)
<i>SsoI</i> (<i>Eco</i> RI)	<i>SsoII</i> (<i>Scr</i> FI)	<i>SspI</i>	<i>Ssp1I</i> (<i>Asu</i> II)
<i>Ssp2I</i> (<i>Cau</i> II)	<i>Ssp4I</i> (<i>Xho</i> I)	<i>Ssp152I</i> (<i>Asu</i> II)	<i>Ssp1725I</i> (<i>Sac</i> II)
<i>SspAI</i> (<i>Eco</i> RII)	<i>Ssp5I</i> (<i>Sna</i> BI)	<i>SspJII</i> (<i>Acyl</i>)	<i>SspK1</i> (<i>Spf</i> I)
<i>SspM1I</i> (<i>Sna</i> BI)	<i>SspM1II</i> (<i>Acyl</i>)	<i>SspM1III</i> (<i>Hgi</i> Cl)	<i>SspM2I</i> (<i>Sna</i> BI)
<i>SspM2II</i> (<i>Acyl</i>)	<i>SsrI</i> (<i>Hpa</i> I)	<i>SsrB6I</i> (<i>Hpa</i> I)	<i>SsrI</i> (<i>Sac</i> I)
<i>SsrII</i> (<i>Sac</i> II)	<i>SsrIV</i> (<i>Bcl</i> I)	<i>SsrV</i> (<i>Sst</i> I)	<i>SteI</i> (<i>Sst</i> I)
<i>SthI</i> (<i>Kpn</i> I)	<i>SthAI</i> (<i>Kpn</i> I)	<i>SthBI</i> (<i>Kpn</i> I)	<i>SthCI</i> (<i>Kpn</i> I)
<i>SthDI</i> (<i>Kpn</i> I)	<i>SthEI</i> (<i>Kpn</i> I)	<i>SthFI</i> (<i>Kpn</i> I)	<i>SthGI</i> (<i>Kpn</i> I)

<i>Sth</i> II (<i>Kpn</i> I)	<i>Sth</i> II (<i>Kpn</i> I)	<i>Sth</i> KI (<i>Kpn</i> I)	<i>Sth</i> LI (<i>Kpn</i> I)
<i>Sth</i> MI (<i>Kpn</i> I)	<i>Sth</i> NI (<i>Kpn</i> I)	<i>Stu</i> I	<i>Sty</i> I
<i>Sua</i> I (<i>Hae</i> III)	<i>Su</i> II (<i>Hae</i> III)	<i>Sur</i> 2I (<i>Bam</i> HI)	<i>Sve</i> 194I (<i>Xba</i> I)
<i>Taq</i> I	<i>Taq</i> II	<i>Taq</i> XI (<i>Eco</i> RII)	<i>Tce</i> I (<i>Mbo</i> II)
<i>Tfi</i> I	<i>Tfi</i> II (<i>Taq</i> I)	<i>Tg</i> II (<i>Sac</i> II)	<i>Tha</i> I (<i>Fnu</i> DII)
<i>Tma</i> I (<i>Fnu</i> DII)	<i>Tmu</i> II (<i>Cau</i> II)	<i>Tru</i> I (<i>Ava</i> II)	<i>Tru</i> II (<i>Mbo</i> I)
<i>Tru</i> 9I (<i>Mse</i> I)	<i>Tru</i> 20I (<i>Xba</i> II)	<i>Tsp</i> I (<i>Tth</i> 111I)	<i>Tsp</i> 45I
<i>Tsp</i> EI	<i>Tsp</i> ZNI (<i>Hae</i> III)	<i>Tte</i> I (<i>Tth</i> 111I)	<i>Tte</i> AI (<i>Hae</i> III)
<i>Tth</i> 111I	<i>Tth</i> 111II	<i>Tth</i> HB8I (<i>Taq</i> I)	<i>Tm</i> I (<i>Hae</i> III)
<i>Trt</i> I (<i>Tth</i> 111I)	<i>Uba</i> II (<i>Ppu</i> MI)	<i>Uba</i> 6I (<i>Mlu</i> I)	<i>Uba</i> 1102I (<i>Esp</i> I)
<i>Uba</i> 1103I (<i>Ava</i> III)	<i>Uba</i> 1103II (<i>Dpn</i> I)	<i>Uba</i> 1103II (<i>Dpn</i> I)	<i>Uba</i> 1104I (<i>Ksp</i> 632I)
<i>Uba</i> 1105I	<i>Uba</i> 1106I (<i>Ppu</i> MI)	<i>Uba</i> 1107I (<i>Sna</i> I)	<i>Uba</i> 1108I
<i>Uba</i> 1109I (<i>Bbv</i> I)	<i>Uba</i> 1110I (<i>Bam</i> HI)	<i>Uur</i> 960I (<i>Fnu</i> 4HI)	<i>Van</i> I (<i>Bgl</i> I)
<i>Van</i> 91I (<i>Pfl</i> MI)	<i>Vha</i> I (<i>Hae</i> III)	<i>Vha</i> 464I (<i>Af</i> II)	<i>Vne</i> I (<i>Apa</i> LI)
<i>Vne</i> AI (<i>Dra</i> II)	<i>Vni</i> I (<i>Hae</i> III)	<i>Vsp</i> I	<i>Xam</i> I (<i>Sall</i>)
<i>Xba</i> I	<i>Xca</i> I (<i>Sna</i> I)	<i>Xci</i> I (<i>Sall</i>)	<i>Xcm</i> I
<i>Xcy</i> I (<i>Sma</i> I)	<i>Xgl</i> 3216I (<i>Pvu</i> I)	<i>Xgl</i> 3217I (<i>Pvu</i> I)	<i>Xgl</i> 3218I (<i>Pvu</i> I)
<i>Xgl</i> 3219I (<i>Pvu</i> I)	<i>Xgl</i> 3220I (<i>Pvu</i> I)	<i>Xho</i> I	<i>Xho</i> II
<i>Xma</i> I (<i>Sma</i> I)	<i>Xma</i> II (<i>Pst</i> I)	<i>Xma</i> III	<i>Xm</i> I (<i>Pvu</i> I)
<i>Xml</i> AI (<i>Pvu</i> I)	<i>Xmn</i> I	<i>Xni</i> I (<i>Pvu</i> I)	<i>Xor</i> I (<i>Pst</i> I)
<i>Xor</i> II (<i>Pvu</i> I)	<i>Xpa</i> I (<i>Xba</i> I)	<i>Xph</i> I (<i>Pst</i> I)	<i>Yen</i> I (<i>Pst</i> I)
<i>Yen</i> AI (<i>Pst</i> I)	<i>Yen</i> BI (<i>Pst</i> I)	<i>Yen</i> CI (<i>Pst</i> I)	<i>Yen</i> DI (<i>Pst</i> I)
<i>Yen</i> EI (<i>Pst</i> I)	<i>Zan</i> I (<i>Eco</i> RII)	<i>Zsp</i> 2I (<i>Ava</i> III)	

unknown recognition sequences

<i>Aam</i> I	<i>Acy</i> II	<i>Aim</i> I	<i>An</i> I
<i>Atu</i> AI	<i>Atu</i> BVI	<i>Atu</i> AMII	<i>Bbe</i> II
<i>Bbe</i> AII	<i>Bbe</i> SI	<i>Bbi</i> IV	<i>Bce</i> 1229I
<i>Bce</i> 14579I	<i>Blo</i> I	<i>Bme</i> I	<i>Bme</i> 205I
<i>Bme</i> 899I	<i>Bpr</i> I	<i>Bsi</i> BI	<i>Bsi</i> EI
<i>Bsi</i> FII	<i>Bsi</i> GI	<i>Bsi</i> JI	<i>Bsi</i> NI
<i>Bsi</i> PI	<i>Bsi</i> RI	<i>Bsi</i> TI	<i>Bsi</i> UI
<i>Bsi</i> VI	<i>Bsi</i> YI	<i>Bsp</i> 12II	<i>Bsr</i> PI
<i>Bss</i> PI	<i>Bst</i> AI	<i>Bst</i> EI	<i>Bsu</i> 1145I
<i>Bsu</i> 1259I	<i>Cal</i> I	<i>Chi</i> I	<i>Chi</i> III
<i>Clu</i> I	<i>Csu</i> I	<i>Cve</i> I	<i>Cvi</i> I
<i>Cvi</i> PI	<i>Cvi</i> QII	<i>Dmo</i> I	<i>Eco</i> CKI
<i>Eco</i> O34I	<i>Eco</i> O44I	<i>Esp</i> II	<i>Fnu</i> 48I
<i>Fsa</i> I	<i>Ggl</i> I	<i>Gsp</i> AlII	<i>Hag</i> I
<i>Hap</i> I	<i>Hcu</i> I	<i>Hgi</i> FI	<i>Hgi</i> KI
<i>Hh</i> II	<i>Hin</i> 1056II	<i>Hsa</i> I	<i>Lpn</i> I
<i>Lpn</i> II	<i>Mbv</i> I	<i>Mgl</i> I	<i>Mg</i> II
<i>Mnn</i> III	<i>Mno</i> II (<i>Mnn</i> III)	<i>Msi</i> II	<i>Mvi</i> I
<i>Mvi</i> II	<i>Nfl</i> II	<i>Nfl</i> III	<i>Ngo</i> DII
<i>Nme</i> I	<i>Nme</i> II	<i>Nme</i> III	<i>Nme</i> IV
<i>Nop</i> II	<i>Nov</i> I	<i>Nsp</i> EII	<i>Nsp</i> LIII
<i>Nsp</i> LIV	<i>Nun</i> I	<i>Oxa</i> II	<i>Pfl</i> I
<i>Pgl</i> II	<i>Pml</i> I	<i>Pss</i> II	<i>Rhp</i> II
<i>Rle</i> I	<i>Rme</i> I	<i>Rrb</i> I	<i>Rrh</i> II
<i>ft2Rnu</i> AI	<i>Sac</i> III	<i>Sal</i> II	<i>San</i> I
<i>Sbr</i> I	<i>Sex</i> II	<i>Sgr</i> I	<i>Shy</i> TI
<i>Sin</i> MII	<i>Sis</i> I	<i>Sod</i> I	<i>Sod</i> II
<i>Ssal</i>	<i>Ssc</i> I	<i>Ssp</i> XI	<i>Sst</i> III (<i>Sac</i> III)
<i>Stm</i> I	<i>Sty</i> D4I	<i>Tml</i> I	<i>Tru</i> III