

FastGene® Buffer Activity/Performance Chart with Restriction Enzymes

Enzyme	Cat.#	Sequence	Activity in FastGene Buffer [%]				Heat Inactivation	Incu. Temp.	Methylation		
			I	II	III	IV			dam	dcm	CpG
Aat II	FG-AatII	GACGT/C	0	25	25	100	65°C for 20 min	37°C	o	o	o
Acc I	FG-AccI	GT/MKAC	75	100	100	100	80°C for 20 min	37°C	o	o	o
Acc III	FG-AccIII	T/CCGGA	0	25	100	0	No	65°C	o	o	o
Acu I	FG-AcuI	CTGAAGN ₁₅ /	50	50	75	100	65°C for 20 min	37°C	o	o	o
Afl II	FG-AflII	C/TTAAG	75	100	75	100	65°C for 20 min	37°C	o	o	o
Age I	FG-AgeI	A/CCGGT	100	50	0	100	65°C for 20 min	37°C	o	o	x
Alw I	FG-AlwI	GGATCNNNN/N	50	50	10	100	No	37°C	x	o	o
Alw26 I	FG-Alw26I	GTCTCN/NNNN	75	100	50	100	65°C for 20 min	37°C	o	o	o
Apa I	FG-ApaI	GGGCC/C	100	25	0	100	65°C for 20 min	25°C	o	o	o
ApaL I	FG-ApaLI	G/TGCAC	50	100	50	100	No	37°C	o	o	o
Apo I	FG-ApoI	R/AATTY	10	75	100	75	80°C for 20 min	50°C	o	o	o
Asc I	FG-AscI	GG/CGCGCC	0	0	0	100	65°C for 20 min	37°C	o	o	x
Ava I	FG-AvaI	C/YCGRG	25	100	100	100	80°C for 20 min	37°C	o	o	x
Ava II	FG-AvaII	G/GWCC	100	100	50	100	80°C for 20 min	37°C	o	o	o
Avr II	FG-AvrII	C/CTAGG	100	50	50	100	80°C for 20 min	37°C	o	o	o
Bal I	FG-BalI	TGG/CCA	0	75	25	75	65°C for 20 min	37°C	o	o	o
BamH I	FG-BamHI	G/GATCC	75	100	100	100	No	37°C	o	o	o
Bcl I	FG-BclI	T/GATCA	50	100	100	75	No	50°C	x	o	o
Bgl I	FG-BglI	GCCNNNN/NGGC	75	75	100	50	65°C for 20 min	37°C	o	o	o
Bgl II	FG-BglII	A/GATCT	10	75	100	10	No	37°C	o	o	o
Bsa I	FG-BsaI	GGTCTCN/NNNN	50	100	100	100	65°C for 20 min	37°C	o	x	x
BsaW I	FG-BsaWI	W/CCGGW	50	100	100	100	80°C for 20 min	60°C	o	o	o
BsiW I	FG-BsiWI	C/GTACG	50	75	100	50	80°C for 20 min	55°C	o	o	x
BsmB I	FG-BsmBI	CGTCTCN/NNNN	10	50	100	25	80°C for 20 min	55°C	o	o	x
BsoB I	FG-BsoBI	C/YCGRG	10	100	100	100	80°C for 20 min	37°C	o	o	o
BspE I	FG-BspEI	T/CCGGA	10	10	100	10	80°C for 20 min	37°C	o	o	o
BsrF I	FG-BsrFI	R/CCGGY	75	100	100	100	No	37°C	o	o	x
BstY I	FG-BstYI	R/GATCY	50	100	75	100	80°C for 20 min	60°C	o	o	o
BtsC I	FG-BtsCI	GGATGNN/	75	100	100	100	80°C for 20 min	50°C	o	o	o
Cfr10 I	FG-Cfr10I	R/CCGGY	10	10	10	25	No	37°C	o	o	x
Cfr42 I	FG-Cfr42I	CCGC/GG	100	50	25	75	65°C for 20 min	37°C	o	o	x
Cfr9 I	FG-Cfr9I	C/CCGGG	0	0	100	0	65°C for 20 min	37°C	o	o	x
Cla I	FG-ClaI	AT/CGAT	50	75	75	100	65°C for 20 min	37°C	o	o	x
CviA I	FG-CviAI	/GATC	10	50	10	100	65°C for 20 min	37°C	x	o	o
Dde I	FG-DdeI	C/TNAG	25	50	100	50	65°C for 20 min	37°C	o	o	o
Dpn I	FG-DpnI	GA/TC	75	100	100	100	80°C for 20 min	37°C	o	o	o
Dpn II	FG-DpnII	/GATC	25	75	100	75	65°C for 20 min	37°C	x	o	o
Dra I	FG-DraI	TTT/AAA	75	100	50	100	65°C for 20 min	37°C	o	o	o
Eag I	FG-EagI	C/GGCCG	10	25	100	10	65°C for 20 min	37°C	o	o	x
Eco47 I	FG-Eco47I	G/GWCC	100	100	100	100	65°C for 20 min	37°C	o	x	x
EcoN I	FG-EcoNI	CCTNN/NNNAGG	50	100	75	100	65°C for 20 min	37°C	o	o	o
EcoO109 I	FG-EcoO109I	RG/GNCCY	50	75	100	100	65°C for 20 min	37°C	o	o	o
EcoR I	FG-EcoRI	G/AATTC	50	100	75	100	65°C for 20 min	37°C	o	o	o
EcoR V	FG-EcoRV	GAT/ATC	0	100	100	50	65°C for 20 min	37°C	o	o	o
EcoT38 I	FG-EcoT38I	GRGCY/C	75	100	0	100	65°C for 20 min	37°C	o	o	o
Esp3 I	FG-Esp3I	CGTCTCN/NNNN	25	50	10	100	65°C for 20 min	37°C	o	o	x
Fok I	FG-FokI	GGATGN ₁₂	100	100	10	100	65°C for 20 min	37°C	o	o	x
Fsp I	FG-FspI	TGC/GCA	75	100	50	100	65°C for 20 min	37°C	o	o	x
Hae II	FG-HaeII	RGCGC/Y	10	100	100	100	80°C for 20 min	37°C	o	o	x
Hae III	FG-HaeIII	GG/CC	50	100	75	100	80°C for 20 min	37°C	o	o	o
Hga I	FG-HgaI	GACGCN ₂ /N ₄	100	75	10	100	65°C for 20 min	37°C	o	o	x
Hinc II	FG-HincII	GTY/RAC	75	50	50	100	65°C for 20 min	37°C	o	o	o
Hind II	FG-HindII	GTY/RAC	100	100	50	100	65°C for 15 min	37°C	o	o	x
Hind III	FG-HindIII	A/AGCTT	25	100	75	100	80°C for 20 min	37°C	o	o	o
Hinf I	FG-HinfI	G/ANTC	50	100	100	100	80°C for 20 min	37°C	o	o	o
HinP1 I	FG-HinP1I	G/CGC	50	100	100	75	65°C for 20 min	37°C	o	o	x
Hpa I	FG-HpaI	GTT/AAC	0	50	25	100	No	37°C	o	o	o
Hpa II	FG-HpaII	C/CGG	100	75	50	100	80°C for 20 min	37°C	o	o	x
Hph I	FG-HphI	GGTGAN ₇ /	100	75	10	100	65°C for 20 min	37°C	o	o	o
Hpy188 I	FG-Hpy188I	TCN/GA	50	75	50	100	65°C for 20 min	37°C	o	o	o
Hpy99 I	FG-Hpy99I	CGWCG/	100	25	10	100	65°C for 20 min	37°C	o	o	x
HpyCH4 V	FG-HpyCH4V	TG/CA	75	100	25	100	65°C for 20 min	37°C	o	o	o
Kpn I	FG-KpnI	GGTAC/C	100	50	0	100	No	37°C	o	o	o
Kpn2 I	FG-Kpn2I	T/CCGGA	100	25	75	50	80°C for 20 min	55°C	o	o	x
Lsp1109 I	FG-Lsp1109I	GCAGCN ₂ /N ₃	25	75	100	100	65°C for 20 min	37°C	o	o	o
Mbo I	FG-MboI	/GATC	75	100	100	100	65°C for 20 min	37°C	x	o	o
Mbo II	FG-MboII	GAAGAN ₇ /	100	100	50	100	65°C for 20 min	37°C	o	o	o
Mlu I	FG-MluI	A/CGCGT	25	75	100	50	65°C for 20 min	37°C	o	o	x
Mnl I	FG-MnlI	CCTCN ₂ /	75	100	75	100	65°C for 20 min	37°C	o	o	o
Mse I	FG-MseI	T/TAA	75	100	100	100	65°C for 20 min	37°C	o	o	o
Msp I	FG-MspI	C/CGG	75	100	75	100	No	37°C	o	o	o
MspA1 I	FG-MspA1I	CMG/CKG	0	100	75	100	65°C for 20 min	37°C	o	o	o
Mun I	FG-MunI	C/AATTG	100	100	10	100	65°C for 20 min	37°C	o	o	o
Nae I	FG-NaeI	GCC/GGC	100	100	25	100	65°C for 20 min	37°C	o	o	x
Nco I	FG-NcoI	C/CATGG	50	100	100	75	65°C for 20 min	37°C	o	o	o
Nde I	FG-NdeI	CA/TATG	75	100	100	100	65°C for 20 min	37°C	o	o	o
NgoM IV	FG-NgoMIV	G/CCGGC	25	75	0	100	80°C for 20 min	37°C	o	o	x
Nhe I	FG-NheI	G/CTAGC	100	100	10	100	65°C for 20 min	37°C	o	o	x
Nla IV	FG-NlaIV	GGN/NCC	0	10	10	100	65°C for 20 min	37°C	o	o	x
o I	FG-oI	GC/GGCCGC	0	50	100	0	65°C for 20 min	37°C	o	o	x
Nru I	FG-NruI	TCG/CGA	0	50	100	75	65°C for 20 min	37°C	o	o	x
Nt.BstNB I	FG-NtBstNBI	GAGTCNNNN/	0	10	100	0	80°C for 20 min	55°C	o	o	o
PaeR7 I	FG-PaeR7I	C/TCGAG	25	100	10	100	No	37°C	o	o	x
PflM I	FG-PflMI	CCANNNN/NTGG	0	100	100	50	65°C for 20 min	37°C	o	x	o
Ple I	FG-PleI	GAGTCNNNN/N	75	75	50	100	65°C for 20 min	37°C	o	o	o
PluT I	FG-PluTI	GGCGC/C	75	25	10	100	65°C for 20 min	37°C	o	o	x
PspG I	FG-PspGI	/CCWGG	25	100	75	100	No	37°C	o	x	o
Pst I	FG-PstI	CTGCA/G	100	100	100	75	80°C for 20 min	37°C	o	o	o
Pvu I	FG-PvuI	CGAT/CG	25	75	100	50	No	37°C	o	o	x
Pvu II	FG-PvuII	CAG/CTG	75	100	25	10	No	37°C	o	o	o
Rsa I	FG-RsaI	GT/AC	100	100	75	100	65°C for 20 min	37°C	o	o	o
Sac I	FG-SacI	GAGCT/C	100	75	25	75	65°C for 20 min	37°C	o	o	o
Sac II	FG-SacII	CCGC/GG	50	100	50	100	65°C for 20 min	37°C	o	o	x
Sal I	FG-SalI	GTCGAC	0	0	100	0	65°C for 20 min	37°C	o	o	x
Sau96 I	FG-Sau96I	G/GNCC	50	100	100	100	80°C for 20 min	37°C	o	o	o
Sbf I	FG-SbfI	CCTGCA/GG	50	25	10	100	80°C for 20 min	37°C	o	o	o
Sca I	FG-ScaI	AGT/ACT	0	0	100	0	80°C for 20 min	37°C	o	o	o
Sda I	FG-SdaI	CCTGCA/GG	75	75	0	100	80°C for 20 min	37°C	o	o	o
Sfi I	FG-SfiI	GGCCN ₃ /NGGCC	25	100	25	100	No	50°C	o	o	o
SgrA I	FG-SgrAI	CR/CCGGYG	100	100	0	100	65°C for 20 min	37°C	o	o	x
Sma I	FG-SmaI	CCC/GGG	0	0	0	100	65°C for 20 min	25°C	o	o	x
SnaB I	FG-SnaBI	TAC/GTA	100	75	25	100	80°C for 20 min	37°C	o	o	x
Spe I	FG-SpeI	A/CTAGT	50	100	75	100	80°C for 20 min	37°C	o	o	o
Sph I	FG-SphI	GCATG/C	50	100	50	75	65°C for 20 min	37°C	o	o	o
Sse9 I	FG-Sse9I	/AATT	100	50	50	75	65°C for 20 min	55°C	o	o	o
Ssp I	FG-SspI	AAT/ATT	50	100	25	100	65°C for 20 min	37°C	o	o	o
Stu I	FG-StuI	AGG/CCT	75	100	75	100	65°C for 20 min	37°C	o	o	o
StyD4 I	FG-StyD4I	/CCNGG	10	100	100	100	65°C for 20 min	37°C	o	o	o
Swa I	FG-SwaI	ATTT/AAAT	75	75	100	25	65°C for 20 min	25°C	o	o	o
Taq I	FG-TaqI	T/CGA	50	100	100	100	80°C for 20 min	65°C	o	o	o
TspM I	FG-TspMI	C/CCGGG	50	75	50	100	No	75°C	o	o	x
Tth111 I	FG-Tth111I	GACN/NGGTC	25	100	100	100	No	65°C	o	o	o
Xba I	FG-XbaI	T/CTAGA	0	100	100	100	65°C for 20 min	37°C	o	o	o
Xho I	FG-XhoI	C/TCGAG	50	100	100	100	80°C for 20 min	37°C	o	o	o
Xma I	FG-XmaI	C/CCGGG	50	75	25	100	65°C for 20 min	37°C	o	o	o

Legend	
o	Not Sensitive
x	Sensitive
o	Conditionally Sensitive