

## NEBuffer Performance Chart with Restriction Enzymes























For your convenience, New England Biolabs offers a simple 4 buffer system. A color-coded 10X NEBuffer is supplied with every restriction endonuclease, ensuring 100% activity. Over 170 restriction enzymes exhibit 100% activity in NEBuffer 4, resulting in increased efficiency, flexibility and ease of use especially when performing double digests.

To help select the best conditions for **double digests**, this chart shows the optimal (supplied) NEBuffer and approximate activity in the four standard NEBuffers for each enzyme. In addition, the table shows recommended reaction temperature, **heat inactivation** temperature, recommended **diluent buffer** and whether the enzyme is **Time-Saver qualified** (i.e., cleaves substrate in 5-15 minutes under recommended conditions). Note: The values listed in this table are approximate. They were obtained using each enzyme's specific unit assay substrate DNA.

Please check out other technical reference information related to restriction enzymes:

[Double Digestion](#) | [Heat Inactivation](#) | [Activity at 37°C](#) | [Diluent Buffers](#) | [Time-Saver Enzymes](#) | [High Fidelity \(HF\) Restriction Enzymes](#)

[Chart Legend](#) | [Icon Descriptions](#)

Enzyme	Supplied NEBuffer	%Activity in NEBuffer					Heat Inac.	Incu. Temp.	Diluent	
		1	2	3	4	EcoRI				
AatII		NEBuffer 4	0	50	50	100	25	65°C	37°C	A
Acc65I		NEBuffer 3 + BSA	10	75	100	25	50	65°C	37°C	A
AccI		NEBuffer 4	50	50	10	100	5	80°C	37°C	A
AcI		NEBuffer 3	25	50	100	50	100	65°C	37°C	A
AclI		NEBuffer 4 + BSA	10	10	0	100	5		37°C	B
AcuI		NEBuffer 4 + SAM	50	100	50	100	100	65°C	37°C	B
AfeI		NEBuffer 4	25	50	25	100	100	65°C	37°C	B
AflII		NEBuffer 4 + BSA	50	100	25	100	0	65°C	37°C	A
AflIII		NEBuffer 3 + BSA	25	75	100	50	100	80°C	37°C	B
AgeI		NEBuffer 1	100	50	10	75	50	65°C	37°C	C
AgeI-HF™		NEBuffer 4 + BSA	100	50	10	100	25	65°C	37°C	A
AgeI-HF™ RE-Mx®		-	-	-	-	-	-	65°C	37°C	-
AhdI		NEBuffer 4 + BSA	25	75	0	100	10	65°C	37°C	A
AleI		NEBuffer 4	10	25	10	100	0	65°C	37°C	A
AluI		NEBuffer 4	100	100	75	100	100	65°C	37°C	B
AlwI		NEBuffer 4	50	100	10	100	5	65°C	37°C	A
AlwNI		NEBuffer 4	10	100	100	100	10	65°C	37°C	A
ApaI		NEBuffer 4 + BSA	25	50	0	100	5	65°C	25°C	A
ApaLI		NEBuffer 4 + BSA	100	100	10	100	5		37°C	A
ApeKI		NEBuffer 3	25	75	100	50	100		75°C	B
ApoI		NEBuffer 3 + BSA	10	75	100	75	100	80°C	50°C	A
Ascl		NEBuffer 4	0	10	10	100	5	65°C	37°C	A

Ascl RE-Mx®		-	-	-	-	-	-	-	65°C	37°C	-
Asel		NEBuffer 3	N/R	75	100 <sup>dd</sup>	N/R	50	65°C	37°C	B	
AsiSI		NEBuffer 4 + BSA	50	100	100	100	0	80°C	37°C	B	
Aval		NEBuffer 4	10	75	10	100	50	80°C	37°C	A	
Avall		NEBuffer 4	50	75	10	100	50	65°C	37°C	A	
AvrII		NEBuffer 4	100	100	50	100	50	80°C	37°C	B	
BaeCI		NEBuffer 1	100	75	10	50	100	65°C	37°C	A	
BaeI		NEBuffer 4 + BSA+SAM	50	100	50	100	40	65°C	25°C	A	
BamHI		NEBuffer 3 + BSA	75	100	100 <sup>dd</sup>	100	100		37°C	A	
BamHI-HF™		NEBuffer 4	100	50	10	100	25		37°C	A	
BanI		NEBuffer 4 + BSA	50	100	50	100	25	65°C	37°C	A	
BanII		NEBuffer 4	100	10	50	100	100	80°C	37°C	A	
BbsI		NEBuffer 2	100	100	25	75	50	65°C	37°C	B	
BbvCI		NEBuffer 4	50	100	10	100	100	80°C	37°C	A	
BbvI		NEBuffer 2	100	100	25	75	100	65°C	37°C	B	
BccI		NEBuffer 1 + BSA	100	50	10	50	15	65°C	37°C	A	
BceAI		NEBuffer 3 + BSA	100	100	100	100	100	65°C	37°C	A	
BcgI		NEBuffer 3 + SAM	N/R	N/R	100 <sup>dd</sup>	N/R	50	65°C	37°C	A	
BciVI		NEBuffer 4	100	50	0	100	25	65°C	37°C	C	
BclI		NEBuffer 3	50	100	100 <sup>dd</sup>	75	100		50°C	A	
BcoDI		NEBuffer 4	50	75	75	100	100	65°C	37°C	B	
Bfal		NEBuffer 4	75	50	10	100	0	80°C	37°C	B	
BfuAI		NEBuffer 3	0	75	100	10	100	65°C	50°C	B	
BfuCI		NEBuffer 4 + BSA	100	50	25	100	15	80°C	37°C	B	
BglI		NEBuffer 3	50	75	100	50	100	65°C	37°C	B	
BglII		NEBuffer 3	10	75	100	10	100		37°C	A	
BipI		NEBuffer 4	50	100	10	100	50		37°C	A	
BmgBI		NEBuffer 3 + BSA	0	25	100	10	50	65°C	37°C	B	
BmrI		NEBuffer 2	75	100	75	100	50	65°C	37°C	B	
BmtI		NEBuffer 2	25	100	25	50	100	65°C	37°C	B	
BmtI-HF™		NEBuffer 4 + BSA	50	100	10	100	N/R	65°C	37°C	B	
BpmI		NEBuffer 3 + BSA	75	100	100	100	100	65°C	37°C	B	
Bpu10I		NEBuffer 3	10	25	100	25	100	80°C	37°C	B	
BpuEI		NEBuffer 4 + SAM	50	100	10	100	100	65°C	37°C	B	
BsaAI		NEBuffer 4	100	100	100	100	100		37°C	C	
BsaBI		NEBuffer 4	50	100	75	100	100	80°C	60°C	B	
BsaHI		NEBuffer 4 + BSA	50	100	100	100	100	80°C	37°C	A	
BsaI		NEBuffer 4 + BSA	75	75	100	100	100	65°C	37°C	B	

Bsa-HF™		NEBuffer 4 + BSA	25	25	10	100	10	65°C	37°C	B
BsaJI		NEBuffer 4	100	100	100	100	100	80°C	60°C	A
BsaWI		NEBuffer 4 + BSA	50	100	50	100	40	80°C	60°C	A
BsaXI		NEBuffer 4	75	100	10	100	15		37°C	B
BseRI		NEBuffer 4	100	100	75	100	100	65°C	37°C	A
BseYI		NEBuffer 3	10	50	100	50	100	65°C	37°C	B
BsgI		NEBuffer 4 + SAM	50	75	50	100	20	65°C	37°C	B
BsiEI		NEBuffer 4 + BSA	50	100	10	100	5	80°C	60°C	A
BsiHKA		NEBuffer 4 + BSA	50	100	100	100	25		65°C	B
BsiWI		NEBuffer 3	100	100	100	25	100	80°C	55°C	A
BsII		NEBuffer 3	10	50	100	75	100	80°C	55°C	A
BsmAI		NEBuffer 4	50	100	100	100	100	80°C	55°C	B
BsmBI		NEBuffer 3	75	100	100	100	100	80°C	55°C	B
BsmFI		NEBuffer 4 + BSA	25	50	50	100	15	80°C	65°C	A
BsmI		NEBuffer 4	75	100	75	100	5	80°C	65°C	A
BsoBI		NEBuffer 2	10	100	100	50	100		37°C	A
Bsp1286I		NEBuffer 4 + BSA	25	25	25	100	10	65°C	37°C	A
BspCNI		NEBuffer 4 + BSA+SAM	100	75	10	100	15	80°C	25°C	A
BspDI		NEBuffer 4	25	75	50	100	100	65°C	37°C	A
BspEI		NEBuffer 3	0	10	100	0	N/R	80°C	37°C	B
BspHI		NEBuffer 4	10	100	50	100	5	65°C	37°C	A
BspMI		NEBuffer 3	N/R	N/R	100	N/R	100	65°C	37°C	B
BspQI		NEBuffer 4	10	50	100	100	100	80°C	50°C	B
BsrBI		NEBuffer 4	50	100	100	100	100	80°C	37°C	A
BsrDI		NEBuffer 2 + BSA	50	100	50	75	50	80°C	65°C	A
BsrFI		NEBuffer 4	10	100	100	100	100		37°C	C
BsrGI		NEBuffer 2 + BSA	25	100	10	100	50	80°C	37°C	A
BsrI		NEBuffer 3	0	50	100	10	100	80°C	65°C	B
BssHII		NEBuffer 3	100	100	100 <sup>dd</sup>	100	100	80°C	50°C	B
BssKI		NEBuffer 3 + BSA	0	50	100	50	100	80°C	60°C	A
BssSI		NEBuffer 3 + BSA	0	50	100 <sup>dd</sup>	10	100	80°C	37°C	B
BstAPI		NEBuffer 4 + BSA	25	100	100	100	100	80°C	60°C	A
BstBI		NEBuffer 4	75	50	25	100	50		65°C	A
BstEII		NEBuffer 3 + BSA	50	75	100	75	100		60°C	A
BstEII-HF™		NEBuffer 4 + BSA	50	75	100	100	N/R		37°C	A
BstEII-HF™ RE-Mix®		-	-	-	-	-	-		37°C	-
BstNI		NEBuffer 2 + BSA	10	100	100	75	50		60°C	A
BstUI		NEBuffer 4	100	100	50	100	100		60°C	A
BstXI		NEBuffer 3	0	50	100	25	100	65°C	37°C	B

BstY1		NEBuffer 2	50	100	75	100	50	80°C	60°C	A
BstZ17I		NEBuffer 4	N/R	N/R	100	100	100		37°C	B
Bsu36I		NEBuffer 3 + BSA	0	25	100	0	15	80°C	37°C	A
BtgI		NEBuffer 3 + BSA	25	50	100	100	100	80°C	37°C	B
BtgZI		NEBuffer 4 + BSA	10	25	0	100	50	80°C	60°C	A
BtsCI		NEBuffer 4	50	100	50	100	25		50°C	B
BtsI		NEBuffer 4 + BSA	100	50	50	100	25	80°C	55°C	A
BtsIMutI		NEBuffer 4 + BSA	100	50	10	100	N/R	80°C	55°C	A
Cac8I		NEBuffer 4	50	75	100	100	50	65°C	37°C	B
Clal		NEBuffer 4 + BSA	10	50	50	100	50	65°C	37°C	A
CspCI		NEBuffer 4 + SAM	10	100	10	100	20	65°C	37°C	A
CviAI		NEBuffer 4 + BSA	75	25	10	100	25	65°C	25°C	C
CviKI-1		NEBuffer 4	10	50	25	100	100	80°C	37°C	A
CviQI		NEBuffer 3 + BSA	75	100	100	75	0		25°C	C
Ddel		NEBuffer 3	75	100	100	75	100	65°C	37°C	A
DpnI		NEBuffer 4	100	100	75	100	100	80°C	37°C	B
DpnII		NEBuffer DpnII	N/R	N/R	100 <sup>dd</sup>	N/R	100	65°C	37°C	B
DraI		CutSmart Buffer	N/R	N/R	N/R	N/R	N/R	65°C	37°C	A
DraIII		NEBuffer 3 + BSA	100	75	100	25	50	65°C	37°C	B
DraIII-HF™		NEBuffer 4 + BSA	0	50	10	100	50		37°C	B
DrdI		NEBuffer 4 + BSA	25	50	10	100	100	65°C	37°C	A
EaeI		NEBuffer 4	100	100	50	100	100	80°C	37°C	A
EagI		NEBuffer 3	10	25	100	10	100	65°C	37°C	C
EagI-HF™		NEBuffer 4	25	100	100	100	100	65°C	37°C	B
EarI		NEBuffer 4	100	100	50	100	100	65°C	37°C	A
EciI		NEBuffer 4	100	50	50	100	N/R	65°C	37°C	A
Eco53kI		NEBuffer 4	100	50	25	100	10	65°C	37°C	A
EcoNI		NEBuffer 4	100	100	75	100	100	65°C	37°C	A
EcoO109I		NEBuffer 4 + BSA	100	100	75	100	15	65°C	37°C	A
EcoP15I		NEBuffer 3 + BSA+ATP	75	100	100	100	50	65°C	37°C	A
EcoRI		NEBuffer EcoRI	100	100	100	100	100	65°C	37°C	C
EcoRI-HF™		NEBuffer 4	10	100	0	100	5	65°C	37°C	C
EcoRI-HF™ RE-Mx®		-	-	-	-	-	-	65°C	37°C	-
EcoRV		NEBuffer 3 + BSA	50	75	100	50	50	80°C	37°C	A
EcoRV-HF™		NEBuffer 4	25	100	100	100	100	65°C	37°C	B
EcoRV-HF™ RE-Mx®		-	-	-	-	-	-	65°C	37°C	-
FatI		NEBuffer 2	10	100	50	50	100	65°C	55°C	A
FauI		NEBuffer 4	100	50	10	100	50	65°C	55°C	A






Fnu4HI		NEBuffer 4	10	25	25	100	10	65°C	37°C	A
FokI		NEBuffer 4	100	100	75	100	25	65°C	37°C	A
FseI		NEBuffer 4 + BSA	100	75	0	100	50	65°C	37°C	B
FspEI		NEBuffer 4 + BSA	N/R	N/R	N/R	100	N/R	65°C	37°C	B
FspI		NEBuffer 4	10	75	10	100	50	65°C	37°C	C
HaeII		NEBuffer 4 + BSA	75	100	50	100	25	80°C	37°C	A
HaeIII		NEBuffer 4	50	100	25	100	100	80°C	37°C	A
HgaI		NEBuffer 1	100	75	50	100	25	65°C	37°C	A
HhaI		NEBuffer 4 + BSA	75	100	100	100	100	65°C	37°C	A
HincII		NEBuffer 3 + BSA	75	100	100	100	100	65°C	37°C	B
HindIII		NEBuffer 2	50	100	10	50	25	65°C	37°C	B
HindIII-HF™		NEBuffer 4	10	100	10	100	10	80°C	37°C	B
HinfI		NEBuffer 4	75	100	75	100	100	80°C	37°C	A
HinPI		NEBuffer 4	100	100	100	100	100	65°C	37°C	A
HpaI		NEBuffer 4	25	25	10	100	100		37°C	A
HpaII		NEBuffer 1	100	50	10	50	15	65°C	37°C	A
HphI		NEBuffer 4	N/R	75	0	100	10	65°C	37°C	B
Hpy166II		NEBuffer 4	100	100	50	100	20	65°C	37°C	C
Hpy188I		NEBuffer 4	50	25	10	100	50	65°C	37°C	A
Hpy188III		NEBuffer 4 + BSA	100	100	10	100	5	65°C	37°C	A
Hpy99I		NEBuffer 4 + BSA	10	10	N/R	100	25	65°C	37°C	A
HpyAV		NEBuffer 4 + BSA	100	100	25	100	50	65°C	37°C	B
HpyCH4III		NEBuffer 4	100	50	25	100	20	80°C	37°C	A
HpyCH4IV		NEBuffer 1	100	25	10	25	15	65°C	37°C	A
HpyCH4V		NEBuffer 4	50	50	25	100	50	65°C	37°C	A
I-CeuI		NEBuffer 4 + BSA	10	10	0	100	N/R	65°C	37°C	B
I-SceI		NEBuffer I-SceI + BSA	10	50	50	50	N/R	65°C	37°C	B
KasI		NEBuffer 4 + BSA	25	100	0	100	100	65°C	37°C	B
KpnI		NEBuffer 1 + BSA	100	75	0	50	25		37°C	A
KpnI-HF™		NEBuffer 4	100	25	0	100	0		37°C	A
KpnI-HF™ RE-Mx®		-	-	-	-	-	-		37°C	-
LpnPI		NEBuffer 4 + BSA	N/R	N/R	N/R	100	N/R	65°C	37°C	B
MboI		NEBuffer 4	75	100	100	100	100	65°C	37°C	A
MboII		NEBuffer 4	100	100	50	100	100	65°C	37°C	C
MfeI		NEBuffer 4	75	50	10	100	5	65°C	37°C	A
MfeI-HF™		NEBuffer 4	75	50	10	100	0	65°C	37°C	A
MfeI-HF™ RE-Mx®		-	-	-	-	-	-	65°C	37°C	-
MuCI		NEBuffer 4	100	10	10	100	0	80°C	37°C	A
Mul		NEBuffer 3	25	75	100	50	100	65°C	37°C	A

Myl		NEBuffer 4 + BSA	50	50	25	100	25	65°C	37°C	A
Mmel		NEBuffer 4 + SAM	N/R	N/R	N/R	100 <sup>dd</sup>	50	80°C	37°C	B
MnlI		NEBuffer 4 + BSA	75	100	50	100	50	65°C	37°C	B
MscI		NEBuffer 4	75	75	75	100	100	65°C	37°C	B
MseI		NEBuffer 4 + BSA	75	100	75	100	50	65°C	37°C	A
MsII		NEBuffer 4	100	100	25	100	10	65°C	37°C	A
MspA1I		NEBuffer 4 + BSA	50	100	50	100	50	65°C	37°C	B
MspI		NEBuffer 4	75	100	50	100	50		37°C	A
MspJI		NEBuffer 4 + BSA	N/R	N/R	N/R	100	N/R	65°C	37°C	B
Mwol		NEBuffer 3	10	75	100	75	100		60°C	B
NaeI		NEBuffer 4	100	75	10	100	25	65°C	37°C	A
NarI		NEBuffer 4	100	75	75	100	50	65°C	37°C	A
Nb.BbvCI		NEBuffer 2	50	100	10	100	N/R	80°C	37°C	A
Nb.BsmI		NEBuffer 3	25	100	100	25	N/R	80°C	65°C	A
Nb.BsrDI		NEBuffer 2	10	100	25	50	N/R	80°C	65°C	A
Nb.BtsI		NEBuffer 4 + BSA	75	100	75	100	N/R	80°C	37°C	A
NciI		NEBuffer 4	100	25	10	100	25		37°C	A
NcoI		NEBuffer 3	100	100	100	100	100	65°C	37°C	A
NcoI-HF™	 	NEBuffer 4	50	100	10	100	100	80°C	37°C	B
NcoI-HF™ RE-Mx®	 	-	-	-	-	-	-	80°C	37°C	-
NdeI		NEBuffer 4	75	100	75	100	100	65°C	37°C	A
NgoMIV		NEBuffer 4	100	50	10	100	0	80°C	37°C	A
NheI		NEBuffer 2 + BSA	100	100	10	100	15	65°C	37°C	C
NheI-HF™	 	NEBuffer 4 + BSA	100	10	0	100	0	80°C	37°C	C
NheI-HF™ RE-Mx®	 	-	-	-	-	-	-	80°C	37°C	-
NlaIII		NEBuffer 4 + BSA	25	25	25	100	5	65°C	37°C	B
NlaIV		NEBuffer 4 + BSA	10	10	10	100	100	65°C	37°C	B
NmeAIII		NEBuffer 4 + SAM	10	10	0	100	0	80°C	37°C	B
NotI		NEBuffer 3 + BSA	0	50	100	25	100	65°C	37°C	C
NotI-HF™	 	NEBuffer 4 + BSA	25	100	25	100	50	65°C	37°C	A
NotI-HF™ RE-Mx®	 	-	-	-	-	-	-	65°C	37°C	-
NruI		NEBuffer 3	0	10	100	10	100	65°C	37°C	A
Nsil		NEBuffer 3	10	75	100	25	100	80°C	37°C	A
NspI		NEBuffer 2 + BSA	100	100	0	100	5	65°C	37°C	A
Nt.A1wI		NEBuffer 2	25	100	25	50	N/R	80°C	37°C	A
Nt.BbvCI		NEBuffer 4	50	100	10	100	N/R	80°C	37°C	A
Nt.BsmAI		NEBuffer 4	100	50	10	100	N/R	65°C	37°C	A
Nt.BspQI		NEBuffer 3	10	75	100	25	N/R	80°C	50°C	B

Nt.BstNBI		NEBuffer 3	0	10	100	10	N/R	80°C	55°C	A
Nt.CviPII		NEBuffer 4	25	100	50	100	N/R	65°C	37°C	A
Pacl		NEBuffer 1 + BSA	100	75	10	100	5	65°C	37°C	A
Pacl RE-Mix®		-	-	-	-	-	-	65°C	37°C	-
PaeR7I		NEBuffer 4	25	100	10	100	50		37°C	A
PciI		NEBuffer 3 + BSA	50	75	100	50	N/R	80°C	37°C	B
PfiFI		NEBuffer 4 + BSA	0	25	25	100	0	65°C	37°C	A
PfiIM		NEBuffer 3 + BSA	0	100	100	50	100	65°C	37°C	A
PhoI		NEBuffer 3	50	50	100	75	100		75°C	A
PI-PspI		NEBuffer PI-PspI + BSA	0	10	10	10	N/R		65°C	B
PI-SceI		NEBuffer PI-SceI + BSA	0	0	0	0	N/R	65°C	37°C	B
PleI		NEBuffer 4	10	100	100	100	50	65°C	37°C	A
PluTI		NEBuffer 4	100	25	5	100	N/R	65°C	37°C	A
PmeI		NEBuffer 4 + BSA	0	50	10	100	5	65°C	37°C	A
PmlI		NEBuffer 1 + BSA	100	75	0	75	15	65°C	37°C	A
PpuMI		NEBuffer 4	0	25	0	100	10		37°C	B
PshAI		NEBuffer 4 + BSA	50	50	0	100	5	65°C	37°C	A
PsiI		NEBuffer 4	10	100	10	100	10	65°C	37°C	B
PspGI		NEBuffer 4	75	100	50	100	100		75°C	A
PspOMI		NEBuffer 4	25	25	10	100	15	65°C	37°C	B
PspXI		NEBuffer 4	0	100	10	100	50	80°C	37°C	B
PstI		NEBuffer 3 + BSA	75	75	100	50	50	80°C	37°C	C
PstI-HF™		NEBuffer 4	10	75	50	100	25	80°C	37°C	C
PvuI		NEBuffer 3 + BSA	10	75	100	10	100		37°C	B
PvuI-HF™		NEBuffer 4 + BSA	25	100	100	100	100		37°C	B
PvuII		NEBuffer 2	100	100	100	100	100		37°C	B
PvuII-HF™		NEBuffer 4	0	25	0	100	0	80°C	37°C	B
RsaI		NEBuffer 4	100	100	50	100	15	65°C	37°C	A
RsrII		NEBuffer 4	25	75	10	100	25	65°C	37°C	C
SacI		NEBuffer 1 + BSA	100	50	10	100	15	65°C	37°C	A
SacI-HF™		NEBuffer 4 + BSA	100	50	10	100	15	65°C	37°C	A
SacII		NEBuffer 4	25	75	10	100	100	65°C	37°C	A
SalI		NEBuffer 3 + BSA	0	0	100	0	50	65°C	37°C	A
SalI-HF™		NEBuffer 4	10	100	100	100	100	65°C	37°C	A
SalI-HF™ RE-Mix®		-	-	-	-	-	-	80°C	37°C	-
SapI		NEBuffer 4	75	50	0	100	50	65°C	37°C	B
Sau3AI		NEBuffer 1 + BSA	100	50	10	100	5	65°C	37°C	A
Sau96I		NEBuffer 4	50	100	100	100	50	80°C	37°C	A
SbfI		NEBuffer 4	75	50	0	100	25	65°C	37°C	A

SbfI-HF™		NEBuffer 4	50	25	0	100	0	65°C	37°C	B
Scal		NEBuffer 3	N/R	N/R	100 <sup>dd</sup>	N/R	N/R	80°C	37°C	A
Scal-HF™		NEBuffer 4	100	100	10	100	15	65°C	37°C	B
Scal-HF™ RE-Mx®		-	-	-	-	-	-	65°C	37°C	-
ScrFI		NEBuffer 4	100	100	100	100	100	65°C	37°C	C
SexAI		NEBuffer 4 + BSA	100	75	50	100	50	65°C	37°C	A
SfaNI		NEBuffer 3	0	75	100	25	50	65°C	37°C	B
Sfcl		NEBuffer 4 + BSA	75	50	10	100	25	65°C	37°C	B
Sfil		NEBuffer 4 + BSA	0	100	10	100	15		50°C	C
Sfol		NEBuffer 4	25	100	50	100	100		37°C	B
SgrAI		NEBuffer 4	100	50	10	100	50	65°C	37°C	A
Smal		NEBuffer 4	0	0	0	100	N/R	65°C	25°C	A
SmlI		NEBuffer 4 + BSA	25	75	25	100	50		55°C	A
SnaBI		NEBuffer 4 + BSA	25	50	25	100 <sup>dd</sup>	5	80°C	37°C	A
SpeI		NEBuffer 4 + BSA	75	100	25	100	50	80°C	37°C	C
SpeI RE-Mx®		-	-	-	-	-	-	80°C	37°C	-
SpeI-HF™		NEBuffer 4 + BSA	25	50	0	100	N/R	80°C	37°C	C
SphI-HF™		NEBuffer 4	50	25	10	100	0	65°C	37°C	B
SphI		NEBuffer 2	100	100	50	100	50	65°C	37°C	B
SspI		NEBuffer SspI	50	100	50	50	100	65°C	37°C	C
SspI-HF™		NEBuffer 4	25	100	0	100	25	65°C	37°C	B
StuI		NEBuffer 4	100	100	50	100	50	65°C	37°C	A
StyD4I		NEBuffer 2	10	100	100	100	20	65°C	37°C	B
StyI		NEBuffer 3 + BSA	25	75	100	10	15	65°C	37°C	A
StyI-HF™		NEBuffer 4	25	100	25	100	0	65°C	37°C	A
Swal		NEBuffer 3 + BSA	10	10	100	10	15	65°C	25°C	B
Taq <sup>q</sup>		NEBuffer 4 + BSA	50	75	100	100	100	80°C	65°C	B
TfiI		NEBuffer 4	100	100	100	100	100		65°C	C
TiiI		NEBuffer 3 + BSA	25	25	100	10	50		75°C	B
Tsel		NEBuffer 4	75	100	100	100	100		65°C	B
Tsp45I		NEBuffer 1 + BSA	100	25	0	75	50		65°C	A
Tsp509I		NEBuffer 1	100	100	100	N/R	100		65°C	A
TspMI		NEBuffer 4	50	75	50	100	20		75°C	B
TspRI		NEBuffer 4 + BSA	25	50	25	100	5		65°C	B
Tth111I		NEBuffer 4	50	25	25	100	100		65°C	B
XbaI		NEBuffer 4 + BSA	0	100	75	100	15	65°C	37°C	A
XbaI RE-Mx®		-	-	-	-	-	-	65°C	37°C	-
XcmI		NEBuffer 2	10	100	50	50	20	65°C	37°C	C



XhoI		NEBuffer 4 + BSA	75	100	100	100	100	65°C	37°C	A
XhoI RE-Mix®		-	-	-	-	-	-	80°C	37°C	-
XmaI		NEBuffer 4 + BSA	25	50	0	100	25	65°C	37°C	A
XmnI		NEBuffer 4 + BSA	100	100	50	100	5	65°C	37°C	A
ZraI		NEBuffer 4	100	25	10	100	10		37°C	B

Note:

1. Sspl Unique Buffer has the same composition as EcoRI Unique Buffer.
2. The values listed in this table are approximate. They were obtained using each enzyme's specific unit assay substrate DNA.