RESTRICTION ENZYMES – DOUBLE DIGESTION

Enzyme	Dilution Buffer #	BSA [100 µg/ml]	Proto-type	Specificity	Reaction Buffers				Reaction temp. [°C]	Inactiva-tion temp. [°C]	Recommended 10x Reaction Buffer
					Low	Medium	High	Acet			
AccI	1	+ BSA	AccI	GT^MKAC	100	75	<25	**100**	37	80	Acet
AcvI	1	+ BSA	PmaCI	CAC^GTG	75	100	75	**100**	37	80	Acet
AluI	2	+ BSA	AluI	AG^CT	75	75	50	**100**	37	65	Acet
ApaI	1	+ BSA	ApaI	GGGCCC^C	25	50	0	**100**	25	65	Acet
AvaI	1	+ BSA	AvaI	C^YCGRG	25	**100**	50	25	37	80	Medium
BalI	1	+ BSA	BalI	TGG^CCA	<25	25	<25	**100**	37	65	Acet
BamHI	BamHI	+ BSA	BamHI	G^GATCC	<25*	100*	**100**	75*	37	NA	High
BanII	1	+ BSA	HgiJII	GRGCY^C	75	25	50	**100**	37	65	Acet
BglI	3	+ BSA	BglI	GCCN$_4$^NGGC	50	75	**100**	50	37	65	High
BglII	2	+ BSA	BglII	A^GATCT	<25	75	**100**	25	37	NA	High
BsiHKCI	1	+ BSA	AvaI	C^YCGRG	<25*	**100**	100	50*	65	NA	Medium
BssHII	1	+ BSA	BsePI	G^CGCGC	100*	100	**100**	100*	50	80	High
BstXI	1	+ BSA	BstXI	CCAN$_5$^NTGG	<25	100	**100**	50	50	65	High
BsuTUI	1	+ BSA	ClaI	AT^CGAT	0	75	50	**100**	37	65	Acet
CviJI	-	NO BSA	CviJI	RG^CY	NR	NR	NR	NR	37	65	CviJI
CviJI*	-	NO BSA	CviJI*	G^C	NR	NR	NR	NR	37	65	CviJI*
DpnI	-	NO BSA	DpnI	GA^TC	100	100	75	**100**	37	80	Acet
DraI	1	+ BSA	AhaIII	TTT^AAA	100	100	75	**100**	37	65	Acet
EcoRI	3	BSA + det.	EcoRI	G^AATTC	25*	100	**100**	50	37	65	High
EcoRV	1	+ BSA	EcoRV	GAT^ATC	<25*	75*	**100**	75*	37	80	High
FokI	-	+ BSA	FokI	GGATG (9/13)^	NR	**100**	NR	NR	37	65	Medium
HaeIII	1	+ BSA	HaeIII	GG^CC	50	**100**	50	75	37	80	Medium
HinclI	2	+ BSA	HindII	GTY^RAC	50	**100**	100	100	37	65	Medium
HindIII	2	+ BSA	HindIII	A^AGCTT	50*	**100**	<25	75*	37	65	Medium
HinfI	1	+ BSA	HinfI	G^ANTC	75	**100**	75	75	37	80	Medium
HpaI	1	+ BSA	HpaI	GTT^AAC	25	50	25	**100**	37	NA	Acet
HpaII	1	+ BSA	HpaII	C^CGG	**100**	75	25	75	37	65	Low
KpnI	1	NO BSA	KpnI	GGTAC^C	**100**	50	<25	50	37	NA	Low
MboI	1	+ BSA	MboI	^GATC	75	**100**	100	100	37	65	Medium
MboII	1	+ BSA	MboII	GAAGA (8/7)^	**100**	50	25	100	37	65	Low
MluI	1	+ BSA	MluI	A^CGCGT	25	75	**100**	50	37	65	High
MmeI	-	NO BSA	MmeI	TCCRAC (20/18)^ or (21/19)^	NR	NR	NR	NR	37	80	MmeI
MnlI	2	+ BSA	MnlI	CCTC (7/6)^	75	**100**	50	75	37	65	Medium
MspI	1	+ BSA	HpaII	C^CGG	100	**100**	25	75	37	65	Medium
NarI	1	+ BSA	NarI	GG^CGCC	NR	NR	NR	NR	37	65	NarI
NcoI	1	+ BSA	NcoI	C^CATGG	75	75	75	**100**	37	65	Acet
NdeI	1	+ BSA	NdeI	CA^TATG	50	100	75	**100**	37	65	Acet
NheI	-	+ BSA	NheI	G^CTAGC	50	0	0	50	37	65	NheI
NotI	3	+ BSA	NotI	GC^GGCCGC	0	75	**100**	25	37	65	High
NruI	1	+ BSA	NruI	TCG^CGA	0	25	**100**	25	37	65	High
PinAI	PinAI	+ BSA	AgeI	A^CCGGT	50	25	<25	100	37	65	PinAI
PstI	1	+ BSA	PstI	CTGCA^G	75	75	**100**	50	37	80	High
PvuI	2	+ BSA	PvuI	CGAT^CG	<25	75	**100**	50	37	80	High
PvuII	1	+ BSA	PvuII	CAG^CTG	75*	**100**	75	75	37	NA	Medium
RsaI	1	+ BSA	RsaI	GT^AC	**100**	75	50	75	37	65	Low
RsrII	3	+ BSA	RsrII	CG^GWCCG	50	75	<25	**100**	37	65	Acet
SacI	1	NO BSA	SacI	GAGCT^C	**100**	50	<25	100	37	65	Low
SacII	1	NO BSA	SacII	CCGC^GG	50	75	75	**100**	37	65	Acet
SalI	1	+ BSA	SalI	G^TCGAC	<25	<25	**100**	<25	37	65	High
Sau3AI	1	+ BSA	MboI	^GATC	75	50	<25	75	37	65	Sau3AI
ScaI	1	+ BSA	ScaI	AGT^ACT	<25*	50*	**100**	<25*	37	80	High
SfiI	3	+ BSA	SfiI	GGCCN$_4$^NGGCC	<25	**100**	25	100	50	NA	Medium
SinI	1	NO BSA	AvaII	G^GWCC	75	50	25	**100**	37	NA	Acet
SmaI	1	+ BSA	SmaI	CCC^GGG	0	0	0	**100**	25	65	Acet
SpeI	-	+ BSA	SpeI	A^CTAGT	75	**100**	50	75	37	65	Medium
SphI	1	+ BSA	SphI	GCATG^C	75	**100**	50	100	37	65	Medium
SspI	1	BSA + det.	SspI	AAT^ATT	50*	**100**	50	50	37	65	Medium
StuI	1	+ BSA	StuI	AGG^CCT	75	**100**	50	75	37	65	Medium
TaqI	2	+ BSA	TaqI	T^CGA	25	50	**100**	50	65	NA	High
TaqII	Taq II Stor. Bf	NO BSA	TaqII	GACCGA (11/9)^	NR	NR	NR	NR	70	NA	TaqII
TspDTI	-	NO BSA	TspDTI	ATGAA (11/9)^	NR	NR	NR	NR	70	NA	TspDTI
TspGWI	-	NO BSA	TspGWI	ACGGA (11/9)^	NR	NR	NR	NR	70	NA	TspGWI
Tth111I	2	+ BSA	Tth111I	GACN^NNGTC	**100**	25	25	100	65	NA	Low
XbaI	1	+ BSA	XbaI	T^CTAGA	25*	**100**	100	75	37	65	Medium
XhoI	1	+ BSA	XhoI	C^TCGAG	75	**100**	100	75	37	65	Medium

NR - buffer is not recommended, to see recommended buffer check product specifications.
NA - thermal inactivation is not available
* - enzyme exhibits star activity under certain conditions

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