vivantis

10-GO™ RE kit

A typical freezer in a molecular biology laboratory consists of a host of the quintessential restriction enzymes from various sources. Next come the laborious hunt for different buffer charts to culminate in a compromise of buffers for double digestions. Vivantis presents a solution to this task! Our 10-go kits consist of selected enzymes for your use, coupled with recommended optimal buffers for double digestions. This is complemented with an unbelievable price performance ratio with the offer of "buy 1, get more". Our 10-go kits present sets of restriction enzymes to provide you with hassle free tools for your molecular biology applications, saving both time and money!

10-go, giving scientists time to tango!

10-GO RE KIT SET (C) - RK3000

LOT #

STORE AT -20°C

Kit Component: Restriction Endonucleases (10 types)
1ml Diluent Viva Buffer A
1ml 10X Buffers (Buffer V1, V2, V3, V4, V5, Universal Buffer, and Buffer *Eco*R I, Buffer *Bsp*19 I)
(BSA included in all Reaction Buffer)

RESTRICTION ENDONUCLEASES SPECIFICATION:

ENZYME	(u/µL)	TOTAL UNIT	REG.SITE	OPT. BUFFER	OPT.(°C)	THERMA INAC.	ACTIVITY IN REACTION BUFFER V1	V2	V3	V4	V5
***Apa* I**	20	150	5'..GGGCC^C..3'	V5	37	65°C, 20min.	75%	75%	75%	75%	100%
***Bam*H I**	20	400	5'..G^GATCC..3'	UB1X	37	65°C, 20min.	75%	75%	50%	75%	50%
***Bsp*19 I** (*Nco* I)	20	100	5'..C^CATGG..3'	SP	37	65°C, 20min.	25%	50%	75%	75%	50%
***Cci*N I** (*Not* I)	5	50	5'..GC^GGCCGC..3'	V5	37	65°C, 20min.	50%	75%	75%	75%	100%
***Eco*R I**	20	500	5'..G^AATTC..3'	SP	37	65°C, 20min.	50%	50%	100%	100%	50%
***Hind* III**	20	400	5'..A^AGCTT..3'	V2	37	65°C, 20min.	75%	100%	75%	75%	75%
***Kpn* I**	20	200	5'..GGTAC^C..3'	V1	37	Non-Thermal Inac.	100%	25%	25%	25%	75%
***Psp*124B I** (*Sac* I)	20	100	5'..GAGCT^C..3'	V2	37	65°C, 20min.	100%	100%	75%	100%	100%
***Sfr*303 I** (*Sac* II)	5	100	5'..CCGC^GG..3'	V1	37	65°C, 20min.	100%	75%	75%	50%	50%
***Xba* I**	20	300	5'..T^CTAGA..3'	V5	37	65°C, 20min.	10%	75%	75%	10%	100%

REMARK:

***Apa* I**	**Blocked by overlapping dcm-methylation (CC^{m}WGG): GGGCCCWGG**
***Bam*H I**	**High enzyme concentration may result in Star Activity.**
***Cci*N I**	**High enzyme concentration may result in Star Activity.**
***Eco*R I**	**High enzyme concentration may result in Star Activity.**
***Xba* I**	**Blocked by overlapping dam-methylation (G^{m}ATC): TCTAGATC**

BUFFER COMPATIBILITY CHART

RK3000	*Apa* I	*Bam*H I	*Bsp*19 I	*Cci*N I	*Eco*R I	*Hind* III	*Kpn* I	*Psp*124BI	*Sfr*303 I	*Xba* I
Apa I		V2/V5	V5	V5	V3/V4	V2/V5	V1/V5	V5	V1	V5
*Bam*H I	V2/V5		V2-V5	V2/V5	V4	V1/V4/V5	V1	V1/V4/V5	V1/V2	V2/V5
*Bsp*19 I	V5	V2-V5		V5	V3/V4	V2-V5	V1/V5	V4/V5	V3	V5
*Cci*N I	V5	V2/V5	V5		V3/V4	V2/V5	V5	V5	V2/V3	V5
*Eco*R I	V3/V4	V4	V3/V4	V3/V4		V3/V4	V1	V4	V3	1.5X UB
Hind III	V2/V5	V1/V4/V5	V2-V5	V2/V5	V3/V4		V1	V2	V1/V2	V2/V5
Kpn I	V1/V5	V1	V1/V5	V5	V1	V1		V1	V1	V5
*Psp*124B I	V5	V1/V4/V5	V4/V5	V5	V4	V2	V1		V1	V5
*Sfr*303 I	V1	V1/V2	V3	V2/V3	V3	V1/V2	V1	V1		V2/V3
Xba I	V5	V2/V5	V5	V5	1.5X UB	V2/V5	V5	V5	V2/V3	

Activity:

100%
75%
50%

Specific buffer
Not applicable

BUFFER COMPOSITION:

V1BFF
10mM Tris-HCl (pH 7.5 at 30°C),10mM $MgCl_2$, and 100µg/ml BSA.

V2BFF
10mM Tris-HCl (pH 7.5 at 30°C),10mM $MgCl_2$, 50mM NaCl, and 100µg/ml BSA.

V3BFF
50mM Tris-HCl (pH 7.5 at 30°C),10mM $MgCl_2$, 100mM NaCl, and 100µg/ml BSA.

V4BFF
10mM Tris-HCl (pH 8.5 at 30°C),10mM $MgCl_2$, 100mM KCl, and 100µg/ml BSA.

V5BFF
30mM Tris-acetate (pH 7.9 at 30°C),10mM Mg-acetate, 60mM K-acetate, and 100µg/ml BSA.

UBBFF
1.0X UB
25mM Tris-acetate (pH 7.6 at 30°C), 10mM Mg-acetate, 100mM K-acetate, 7mM 2-mercaptoethanol and 50µg/ml BSA

SPBFF
Buffer ***Eco*R I**
500mM Tris-HCl (pH 7.5 at 30°C),10mM $MgCl_2$, 100mM NaCl , 0.02% triton X-100, and 0.1mg / ml BSA.

ENZYME	LIGATION / RECUTTING ASSAY	OVERDIGESTION ASSAY
***Apa* I**	After 20-fold overdigestion with ***Apa* I**, more than 90% of the DNA fragments can be ligated and recut.	An unaltered banding pattern was observed after 1µg of DNA was digested with 40u of ***Apa* I** for 16 hours at 37°C (WIthout BSA).
***Bam*H I**	After 20 -fold overdigestion with ***Bam*H I**, more than 90% of the DNA fragments can be ligated and recut.	An unaltered banding pattern was observed after 1µg of DNA was digested with 40 u of ***Bam*H I** for 16 hours at 37°C .
***Bsp*19 I** (*Nco* I)	After 20-fold overdigestion with ***Bsp*19 I**, more than 90% of DNA fragments can be ligated and recut.	An unaltered banding pattern was observed after 1µg of DNA was digested with 40u of ***Bsp*19 I** for 16 hours at 37°C (Without BSA).
***Cci*N I** (*Not* I)	After 5-fold overdigestion with ***Cci*N I**, more than 90% of the DNA fragments can be ligated and recut.	An unaltered banding pattern was observed after 1µg of DNA was digested with 10 u of ***Cci*N I** for 16 hours at 37°C (Without BSA).
***Eco*R I**	After 20-fold overdigestion with ***Eco*R I**, more than 95% of the DNA fragments can be ligated and recut.	An unaltered banding pattern was observed after 1µg of DNA was digested with 40u of ***Eco*R I** for 16 hours at 37°C (Without BSA).
***Hin*d III**	After 20-fold overdigestion with ***Hin*d III**, more than 90% of the DNA fragments can be ligated and recut.	An unaltered banding pattern was observed after 1µg of DNA was digested with 40u of ***Hin*d III** for 16 hours at 37°C.
***Kpn* I**	After 20-fold overdigestion with ***Kpn* I**, more than 90% of the DNA fragments can be ligated and recut.	An unaltered banding pattern was observed after 1µg of DNA was digested with 40u of ***Kpn* I** for 16 hours at 37°C (Without BSA).
***Psp*124B I**	After 20-fold overdigestion with ***Psp*124B I**, more than 95% of the DNA fragments can be ligated and recut.	An unaltered banding pattern was observed after 1µg of DNA was digested with 40u of ***Psp*124B I** for 16 hours at 37°C (Without BSA).
***Sfr*303 I**	After 5-fold overdigestion with ***Sfr*303 I**, more than 90% of the DNA fragments can be ligated and recut.	An unaltered banding pattern was observed after 1µg of DNA was digested with 10u of ***Sfr*303 I** for 16 hours at 37°C.
***Xba* I**	After 20-fold overdigestion with ***Xba* I**, 90% of the DNA fragments can be ligated and recut.	An unaltered banding pattern was observed after 1µg of DNA was digested with 40u of ***Xba* I** for 16 hours at 37°C.