



The ENZYME Company

Enzyme	Prototype	Recognition Sequence	Cat No	Package, u.a.
--------	-----------	----------------------	--------	---------------

Apa I	Apa I	GGGCC [^] C C [^] CCGGG	209010	1000 units
			209050	5000 units

Lot-number:	ExpDate:	Quantity:

Origin	Acetobacter pasteurianus
Concentration	10 u/μl
Storage conditions	10 mM Tris-HCl (pH 7.5); 200 mM KCl; 0.1 mM EDTA; 7 mM 2-mercaptoethanol; 200 ug/ml BSA; 50% glycerol. Store at -20°C.
Ligation	After 20-fold overdigestion with enzyme more than 90% of the DNA fragments can be ligated and recut.
Non-specific activity	No nonspecific activity was detected after incubation of 1 ug of DNA with 40 u.a. of enzyme for 16 hours at 37°C.
Optimum temperature	37 °C
Inactivation 20 minutes under 65 °C	Yes
Optimum SE-buffer	Y (33 mM Tris-acetate (pH 7.9 at 25°C); 10 mM magnesium acetate; 66 mM potassium acetate; 1 mM DTT + 100 ug/ml BSA.) + BSA

Enzyme activity in % of maximum :

B	G	O	W	Y	TangoTM	2X TangoTM
50 - 75	25 - 50	0 - 10	0 - 10	100	20-50	0-20

Note: Blocked by overlapping Dcm methylation(C^mCWGG): GGGCCCWGG

To obtain 100% activity, BSA should be added to the 1x reaction mix to a final concentration of 100 ug/ml.

References: Seurinck, J., Van de Voorde, A., Van Montagu, M. Nucleic Acids. Res.11: 4409-4415 (1983).

Unit-definition	One unit of the enzyme is the amount required to hydrolyze 1 μg of DNA in 1 hour in a total reaction volume of 50 μl. Concentrated enzymes are diluted to approximately 1000 units/ml with the buffer (10mM Tris-HCL (ph7.6); 50 mM KCL; 0,1 mM EDTA; 1 mM DTT; 200 μg/ml BSA; 50% glycerol) before determining their activity.
-----------------	---

Bioron GmbH

Contact: Phone: +49-(0)-621- 5720 915 Fax:+49-(0)-621-5720 916
E-Mail: info@bioron.net NET: www.bioron.net