

Product Information

Sal I from *Streptomyces albus* G

Catalog Number **R0754**

Storage Temperature –20 °C

CAS RN 81295-38-7

EC 3.1.21.4

Synonym: Restriction Endonuclease *Sal I*

Product Description

Sal I recognizes the sequence G/TCGAC and generates fragments with 5'-cohesive termini.¹ *Sal I* generates compatible ends to *Xho I*. *Sal I* is inhibited by the presence of 5-methylcytosine at GT^mCGAC and N⁶-methyladenine at GTCG^mAC. *Sal I* exhibits star activity under non-optimal conditions.

100 units of *Sal I* can be heat inactivated after 15 minutes at 65 °C.

Sal I Storage and Dilution Buffer: 10 mM Tris-HCl, 1.0 mM EDTA, 10 mM dithioerythritol, and 50% (v/v) glycerol, pH 7.5

Activity: 10,000 units/ml

Cutting: 100%

Unit Definition: One unit is the enzyme activity that completely cleaves 1 µg λ DNA in 1 hr. at 37 °C in a total volume of 25 µl of Buffer SH for restriction enzymes. 1 µg pBR322 DNA is digested completely by 5 units of *Sal I* on account of the larger number of cleavage sites per µg of pBR322 DNA as compared to λDNA. For cleavage of genomic DNA embedded in agarose, 10 units of *Sal I* per µg of DNA incubated for 4 hrs. at 37 °C is recommended.

Digestion Buffer SH (B3657) is supplied as a 10× concentrate. Composition of 1× Digestion Buffer SH for *Sal I* – 100% Digestion at 37 °C: 50 mM Tris-HCl, 100 mM NaCl, 10 mM MgCl₂, and 1 mM dithioerythritol, pH 7.5

Non-specific endonuclease activity: No degradation detected with >40 units for 16 hours. 1 µg of λDNA is incubated for 16 hours in 50 µl of 1× Digestion Buffer SH with excess of *Sal I*.

Fold over digestion: 640 (40 units × 16 hrs.)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

References

1. Arrand, J.R. et al., A new restriction endonuclease from *Streptomyces albus* G. *J. Mol. Biol.*, **118**, 127-135 (1978)

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