**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. Sal I generates compatible ends to Xho I. Sal I is inhibited by the presence of 5-methylcytosine at GT$m^m$CGAC and N$^6$-methyladenine at GTCG$m^m$AC. 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 MgCl$_2$, 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**


©2012 Sigma-Aldrich Co. LLC. All rights reserved. SIGMA-ALDRICH is a trademark of Sigma-Aldrich Co. LLC, registered in the US and other countries. Sigma brand products are sold through Sigma-Aldrich, Inc. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see product information on the Sigma-Aldrich website at www.sigmaaldrich.com and/or on the reverse side of the invoice or packing slip.