

Product Information

Sma I from *Serratia marcescens* S_b

Catalog Number **R4503**
Storage Temperature –20 °C

CAS RN 82391-42-2
EC 3.1.21.4
Synonym: Restriction Endonuclease *Sma* I

Product Description

Sma I recognizes the sequence CCC/GGG and generates fragments with blunt ends.¹



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

Sma I Storage and Dilution Buffer: 10 mM potassium phosphate, 300 mM NaCl, 1.0 mM EDTA, 5 mM dithioerythritol, 0.02% (v/v) polydocanol, and 50% (v/v) glycerol, pH 7.0

Activity: 10,000 units/ml
Cutting: 100%

Unit Definition: One unit is the enzyme activity that completely cleaves 1 µg of λ DNA in 1 hr. at 25 °C in a total volume of 25 µl of 1× Digestion Buffer SA for restriction enzymes.

Digestion Buffer SA (B7531) is supplied as a 10× concentrate. Composition of 1× Digestion Buffer SA for *Sma* I – 100% Digestion at 25 °C: 33 mM Tris-acetate, 66 mM potassium acetate, 10 mM magnesium acetate, and 0.5 mM dithiothreitol (DTT), pH 7.9

Non-specific endonuclease activity: No degradation detected with >20 units for 16 hours. 1 µg of λDNA is incubated for 16 hours in 50 µl of 1× Digestion Buffer SA with >20 units of *Sma* I.

Fold over digestion: 800 (50 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. Endow, S., et al. J. Mol. Biol., **112**, 521 1977.

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