

# Bst Nickase

**CATALOG NO.:** M1235-1000  
**AMOUNT:** 1000 U (100 µl)  
**CONCENTRATION:** 10 U/µl  
**FORM:** Liquid  
**SOURCE:** Recombinant *E.coli*  
**KIT COMPONENTS:**

Components	Volume	Part No.
Bst Nickase (10 U/µl)	100 µl	M1235-1000-1
10X Bst Nickase Reaction Buffer	1.0 ml	M1235-1000-2

**DESCRIPTION:** Bst Nickase is a nicking endonuclease from *Bacillus stearothermophilus* that cleaves one DNA strand of a double-stranded DNA substrate. This site-specific endonuclease cleaves a single strand of DNA four base pairs away and 3' of its recognition sequence.

**APPLICATION:** Single strand DNA nicking

**RECOGNITION SEQUENCE:**  
 5'...GAGTCNNNNN...3'  
 3'...CTCAGNNNNN...3'

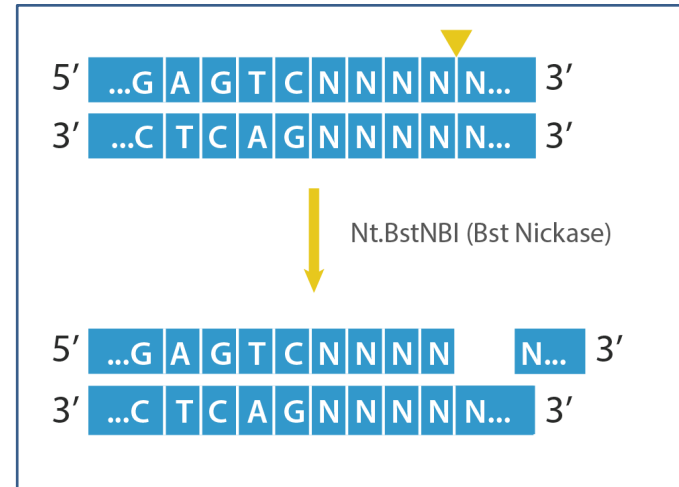
**ENZYME STORAGE BUFFER:** 10 mM Tris-HCl (pH 7.5), 0.1 mM EDTA, 1 mM DTT, 50 mM KCl, 200 µg/ml BSA and 50% (v/v) Glycerol.

**ENZYME UNIT DEFINITION:** One unit is defined as the amount of Bst Nickase that digests 1 µg of T7 DNA into 5 distinct bands (13, 9, 7, 6, and 4 kb) in 1 hour at 55°C in a reaction volume of 50 µl.

**REACTION CONDITIONS:** Use 1X Bst Nickase Reaction Buffer and incubate at 55°C

**HEAT INACTIVATION:** Heat at 80°C for 20 minutes

**STORAGE CONDITIONS:** Store at -20°C. Avoid repeated freeze-thaw cycles of all components to retain maximum performance. All components are stable for one year from the date of shipping when stored and handled properly.



**RELATED PRODUCTS:**

- Exonuclease I, *E.coli* (Cat# M1222-100)
- Exonuclease III, *E.coli* (Cat# M1223-100)
- T7 Endonuclease I (Cat# M1221-100)
- DNase I (Cat# M1230-2000)
- CRISPR sgRNA Synthesis Kit (Cat# K1251)
- Classic CRISPR sgRNA Synthesis Kit (Cat# K1252)
- Express CRISPR sgRNA Synthesis Kit (Cat# K1253)

**FOR RESEARCH USE ONLY! Not to be used on humans.**