

MutS (*E. coli*)

Catalogue number: MB21101, 50 µg
MB21102, 250 µg

Description

MutS is a mismatch repair enzyme from *Escherichia coli*, expressed in the recombinant form in the same host, which selectively binds DNA fragments containing mispaired or unpaired bases. MutS binds mismatches that most resemble base pairs (i.e., G:T mismatches in G:C rich regions), allowing MutS to be used for mutation/SNP detection, isolation applications and mismatch repair structure/function studies.

Storage temperature

MutS should be stored at -20 °C in a constant temperature freezer. The protein will remain stable till the expiry date if stored as specified.

Enzyme concentration: 0.5 µg/µL

Quality control assays

Purity

Recombinant MutS is >95% pure as judged by SDS polyacrylamide gel electrophoresis followed by BlueSafe staining (Nzytech, Cat. No. MB15201).

Nuclease assays

0.2-0.3 µg of pNZY28 plasmid DNA are incubated with 5 µg of MutS for 14-16 hours at 37 °C. Following incubation, the DNA is visualized on a GreenSafe-stained agarose gel. There must be no visible nicking or cutting of the DNA.

Functional assay

MutS (*E. coli*) is assayed in a DNA interaction reaction followed by electrophoretic mobility shift assay (EMSA). The efficiency of enzyme reaction is evaluated by the observation of MutS-DNA complexes on agarose gel.

Related products

Product name	Cat. No.
Water for Molecular Biology	MB111
dNTPs NZYSet	MB08701
Agarose (ultrapure grade)	MB052
NZYGene Synthesis kit	MB33901
Speedy Ligase	MB130
NZY5α competent cells	MB004

V2401

For research use only.