

TDG, 1-410aa, Human, His tag, E.coli

Cat.NO.: TP04174

3th Edition

Synonyms:Thymine-DNA glycosylase, G/T mismatch-specific thymine DNA glycosylase,

Description:Thymine-DNA glycosylase, also known as TDG, belongs to the TDG/mug DNA glycosylase family. TDG is a nuclear protein which corrects G/T mismatches to G/C pairs by hydrolyzing the carbon-nitrogen bond between the sugar-phosphate backbone of the DNA and the mispaired thymine. TDG can also remove uracil and 5-bromouracil from mispairings with guanine. This enzyme plays a central role in cellular defense against genetic mutation caused by the spontaneous deamination of 5-methylcytosine and cytosine. Recombinant human TDG protein, fused to His-tag at N-terminus, was expressed in E.coli

Form:Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.4 Urea, 10% glycerol, 0.1M NaCl

Molecular Weight:48.4 kDa (433aa)

Sequences:

MGSSHHHHHSSGLVPRGSHMGSMEAENAGSYSLQQAQAFYTFPFQQLMAEAPNMAVVNEQQMPPEEVPAPAP
AQEPVQEAPKGRKRKPRRTTEPKQPVEPKKPVESKKSAGSAKSKEKQEKITDTFKVVKRQVDRFNGVSEAELLTKTLP
DILTFNLDIVIIGINPGLMAAYKGGHYPGPGNHFWKCLFMSGLSEVQLNHMDHTLPGKYGIGFTNMVERTTPGSKD
LSSKEFREGGRILVQKLQKYQPRIAVFNGKCIYEIFSKEVFGVKVKNLEFGLQPHKIPDTETLCYGMPSSSARCAQFP
RAQDKVHYIYIKLKLDRDQLKGIERNMDVQEVQYTFDLQLAQEDAKKMAVKEEKYDPGYEAAYGGAYGENPCSSEP
CGFSSNGLIESVELRGESAFSGIPNGQWMTQSFTDQIPSFNSHCGTQEQEEESHA

Purity:> 95% by HPLC

Concentration:0.5 mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.