

32-2841: TDG Recombinant Protein

Alternative Name : Thymine-DNA Glycosylase, G/T Mismatch-Specific Thymine DNA Glycosylase, EC 3.2.2.29.

Description

Source : E.coli. TDG Human Recombinant produced in E. coli is a single polypeptide chain containing 433 amino acids (1-410) and having a molecular mass of 48.4 kDa. TDG is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. Thymine-DNA glycosylase (TDG) is a member of the TDG/mug DNA glycosylase family. TDG is a nuclear protein that fixes 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. In addition, TDG removes uracil and 5-bromouracil from mispairings with guanine. The TDG enzyme has an essential role in cellular defense against genetic mutation triggered by the spontaneous deamination of 5-methylcytosine and cytosine.

Product Info

Amount :	20 µg
Purification :	Greater than 90% as determined by SDS-PAGE.
Content :	The TDG solution (0.5mg/1ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.1M NaCl, 0.4M Urea and 10% glycerol.
Storage condition :	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.
Amino Acid :	MGSSHHHHHH SSGLVPRGSH MGSMEAENAG SYSLQQAQAF YTFPFQQLMA EAPNMAVVNE QQMPEEVPA APAQEPVQEA PKGRKRKPRT TEPKQPVEPK KPVESKKSGK SAKSKEKQEK ITDTFKVKRK VDRFNGVSEA ELLTKLPDI LTFNLDIVII GINPGLMAAY KGHHPGPGN HFWKCLFMSG LSEVQLNHMD DHTLPGKYGI GFTNMVERTT PGSKDLSSKE FREGGRILVQ KLQKYQPRIA VFNGKCIYEI FSKEVFGVKV KNLEFGLQPH KIPDTETLCY GMPSSSARCA QFPRAQDKVH YYIKLKDLRD QLKGIERNMD VQEVQYTFDL QLAQEDAKKM AVKEEKYDPG YEAAYGGAYG ENPCSSEPCG FSSNGLIESV ELRGESAFSG IPNGQWMTQS FTDQIPSFNS HCGTQEQUEE SHA.

