Recombinant Human G/T mismatch-specific thymine DNA glycosylase (TDG)

Product Code	CSB-MP623816HU
Abbreviation	TDG
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q13569
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	≥85% (SDS-PAGE)
Sequence	MEAENAGSYS LQQAQAFYTF PFQQLMAEAP NMAVVNEQQM PEEVPAPAPA QEPVQEAPKG RKRKPRTTEP KQPVEPKKPV ESKKSGKSAK SKEKQEKITD TFKVKRKVDR FNGVSEAELL TKTLPDILTF NLDIVIIGIN PGLMAAYKGH HYPGPGNHFW KCLFMSGLSE VQLNHMDDHT LPGKYGIGFT NMVERTTPGS KDLSSKEFRE GGRILVQKLQ KYQPRIAVFN GKCIYEIFSK EVFGVKVKNL EFGLQPHKIP DTETLCYVMP SSSARCAQFP RAQDKVHYYI KLKDLRDQLK GIERNMDVQE VQYTFDLQLA QEDAKKMAVK EEKYDPGYEA AYGGAYGENP CSSEPCGFSS NGLIESVELR GESAFSGIPN GQWMTQSFTD QIPSFSNHCG TQEQEEESHA
Source	Mammalian cell
Target Names	TDG
Protein Names	Recommended name: G/T mismatch-specific thymine DNA glycosylase EC= 3.2.2.29 Alternative name(s): Thymine-DNA glycosylase
Expression Region	1-410
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	full length protein
Target Details	This protein belongs to the TDG/mug DNA glycosylase family. Thymine-DNA glycosylase (TDG) removes thymine moieties from G/T mismatches by hydrolyzing the carbon-nitrogen bond between the sugar-phosphate backbone of DNA and the mispaired thymine. With lower activity, this enzyme also removes thymine from C/T and T/T mispairings. 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. This gene may have a pseudogene in the p arm of chromosome 12.

Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
Shelf Life	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.