

## Product datasheet for **AR50529PU-N**

### TDG (1-410, His-tag) Human Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	TDG (1-410, His-tag) human protein, 0.5 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MGSMEAENAG SYSLQQAQAF YTFPFQQLMA EAPNMAVVNE QQMPEEVPAP APAQEPVQEA PKGRKRKPRT TEPKQPVEPK KPVESKKS GK SAKSKEKQEK ITDTFKVKRK VDRFNGVSEA ELLTKLPDI LTFNLDIVII GINPGLMAAY KGHHPGPGN HFWKCLFMSG LSEVQLNHMD DHTLPGKYGI GFTNMVERTT PGSKDLSSKE FREGGRILVQ KLQKYQPRIA VFNGKCIYEI FSKEVFGVKV KNLEFGLQPH KIPDTETLCY GMPSSSARCA QFPRAQDKVH YYIKLKD LRD QLKGIERNMD VQEVQYTFDL QLAQEDAKKM AVKEEKYDPG YEAAYGGAYG ENPCSSEPCG FSSNGLIESV ELRGESAFSG IPNGQWMTQS FTDQIPFSFN HCGTQE QEEE SHA
Tag:	His-tag
Predicted MW:	48.4 kDa
Concentration:	lot specific
Purity:	>90% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.4 Urea, 10% glycerol, 0.1M NaCl
Preparation:	Liquid purified protein
Storage:	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<a href="#">NP_003202</a>
Locus ID:	6996
UniProt ID:	<a href="#">Q13569</a> , <a href="#">B4E127</a>
Cytogenetics:	12q23.3
Synonyms:	hTDG



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**Summary:** The protein encoded by this gene 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. [provided by RefSeq, Jul 2008]

**Protein Families:** Druggable Genome

**Protein Pathways:** Base excision repair