

Product datasheet for **AM50036PU-S**

Thymine DNA glycosylase (TDG) Mouse Monoclonal Antibody [Clone ID: AT2F7]

Product data:

Product Type:	Primary Antibodies
Clone Name:	AT2F7
Applications:	ELISA, WB
Recommended Dilution:	The antibody has been tested by ELISA, Western blot analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results. Recommended starting dilution is 1:250.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Recombinant human TDG (1-410aa) purified from E. coli
Formulation:	PBS, pH 7.4 containing 0.02% Sodium Azide and 10% Glycerol State: Purified State: Liquid purified IgG fraction
Concentration:	lot specific
Purification:	Protein-A affinity chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	thymine DNA glycosylase
Database Link:	Entrez Gene 6996 Human Q13569



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Background:

G/T mismatch-specific thymine DNA glycosylase is an enzyme that in humans is encoded by the TDG gene. Several bacterial proteins have strong sequence homology with this protein. 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.

Synonyms:

E130317C12Rik; hTDG; JZA-3; Jza1; OTTMUSP00000028912; OTTMUSP00000028913

Protein Families:

Druggable Genome

Protein Pathways:

Base excision repair

Product images:

The cell lysates of HeLa (30ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human TDG antibody (1:250). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.