

Product datasheet for AM50036PU-S

OriGene Technologies, Inc.

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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





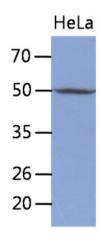
Background:

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.