

## Product datasheet for **TA808511BM**

### Thymine DNA glycosylase (TDG) Mouse Monoclonal Antibody (HRP conjugated) [Clone ID: OTI3A12]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI3A12
Applications:	IHC, WB
Recommended Dilution:	IHC 1:150
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Human recombinant protein fragment corresponding to amino acids 160-253 of human TDG(NP_003202) produced in E.coli.
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol.
Concentration:	0.5 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	HRP
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	45.9 kDa
Gene Name:	thymine DNA glycosylase
Database Link:	<a href="#">NP_003202</a> <a href="#">Entrez Gene 21665 Mouse</a> <a href="#">Entrez Gene 114521 Rat</a> <a href="#">Entrez Gene 6996 Human</a> <a href="#">Q13569</a>



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**Background:**

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]

**Synonyms:**

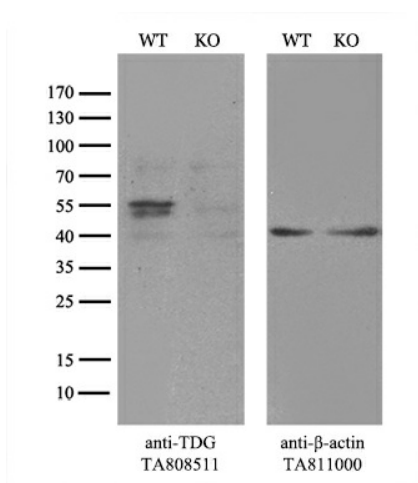
hTDG

**Protein Families:**

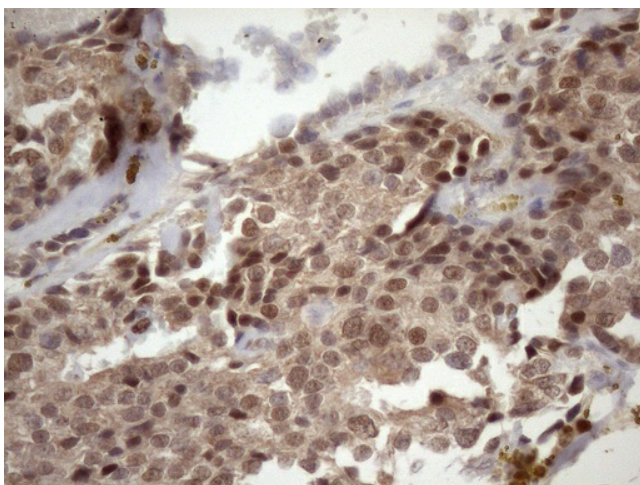
Druggable Genome

**Protein Pathways:**

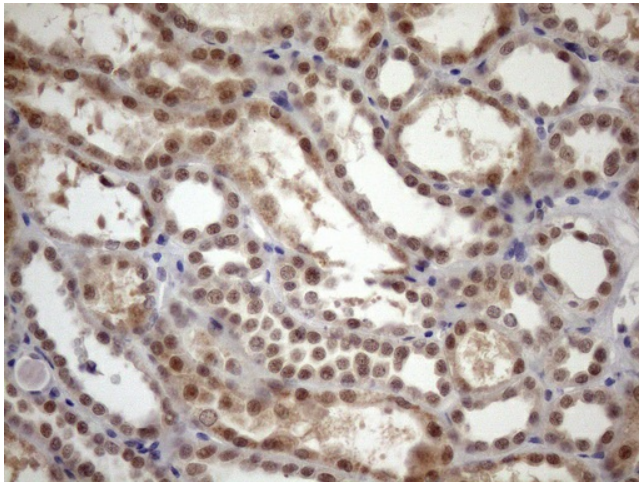
Base excision repair

**Product images:**

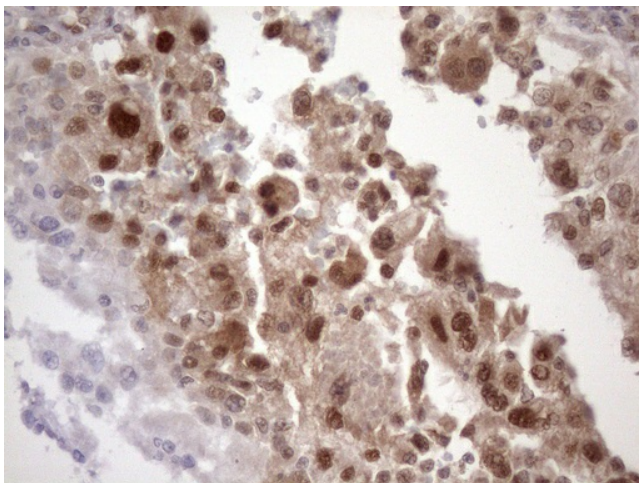
Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and TDG-Knockout HeLa cells (KO, Cat# [LC810235]) were separated by SDS-PAGE and immunoblotted with anti-TDG monoclonal antibody [TA808511], (1:500). Then the blotted membrane was stripped and reprobed with anti- $\beta$ -actin antibody ([TA811000]) as a loading control.



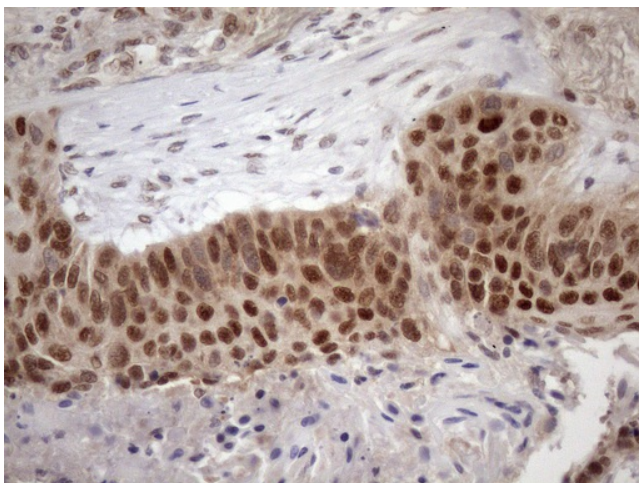
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human breast tissue using anti-TDG mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808511]) (1:150)



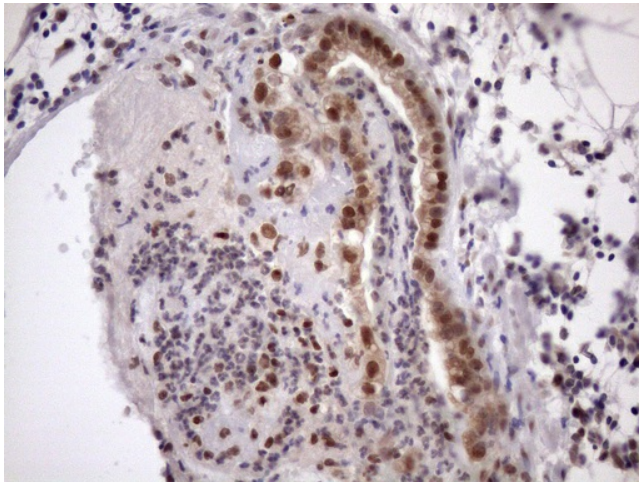
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human colon tissue using anti-TDG mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808511]) (1:150)



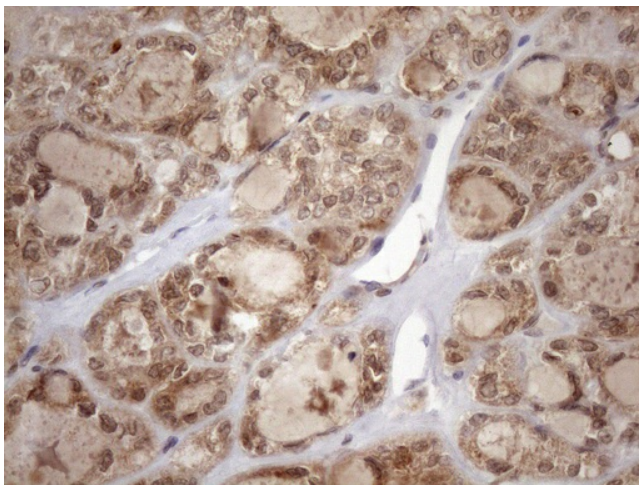
Immunohistochemical staining of paraffin-embedded Human Kidney tissue within the normal limits using anti-TDG mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808511]) (1:150)



Immunohistochemical staining of paraffin-embedded Carcinoma of Human lung tissue using anti-TDG mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808511]) (1:150)



Immunohistochemical staining of paraffin-embedded Carcinoma of Human pancreas tissue using anti-TDG mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808511]) (1:150)



Immunohistochemical staining of paraffin-embedded Carcinoma of Human thyroid tissue using anti-TDG mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808511]) (1:150)