

## **Product datasheet for TA808610S**

### OriGene Technologies, Inc.

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## Thymine DNA glycosylase (TDG) Mouse Monoclonal Antibody [Clone ID: OTI3C11]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI3C11
Applications: IHC, WB

**Reactivity:** WB 1:2000, 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 and 0.02% sodium azide.

Concentration: 1 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

**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: NP 003202

Entrez Gene 21665 MouseEntrez Gene 114521 RatEntrez Gene 6996 Human

013569





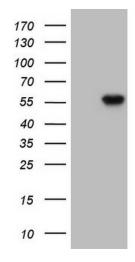
#### Background:

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:**



WT KO WT KO

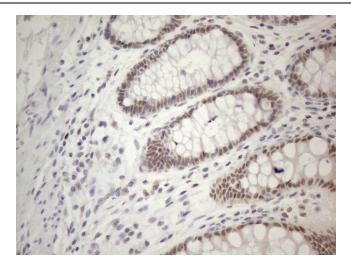
170 —
130 —
100 —
70 —
55 —
40 —
35 —
25 —
115 —
10 —

anti-TDG TA808610 TA811000

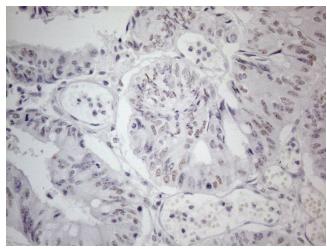
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TDG (Cat# [RC207113], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TDG (Cat# [TA808610])(1:2000). Positive lysates [LY401109] (100ug) and [LC401109] (20ug) can be purchased separately from OriGene.

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 [TA808610], (1:500). Then the blotted membrane was stripped and reprobed with antibactin antibody ([TA811000]) as a loading control.

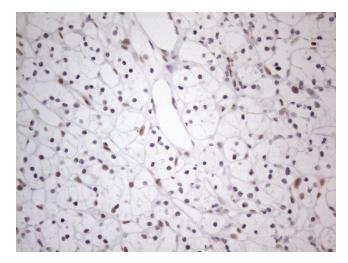




Immunohistochemical staining of paraffinembedded Human colon tissue within the normal limits using anti-TDG mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808610]) (1:150)

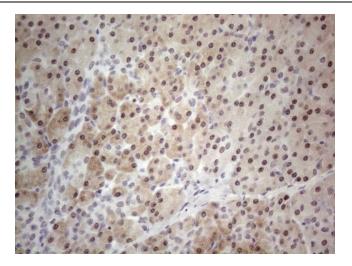


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human colon tissue using anti-TDG mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808610]) (1:150)

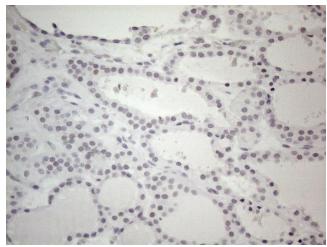


Immunohistochemical staining of paraffinembedded Carcinoma of Human kidney tissue using anti-TDG mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808610]) (1:150)

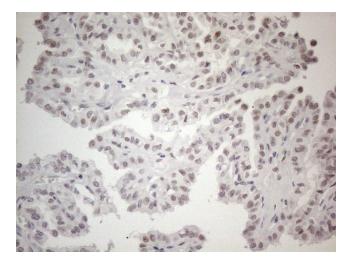




Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-TDG mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808610]) (1:150)

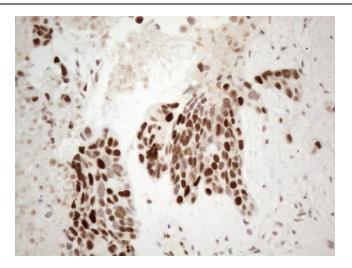


Immunohistochemical staining of paraffinembedded Human thyroid tissue within the normal limits using anti-TDG mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808610]) (1:150)

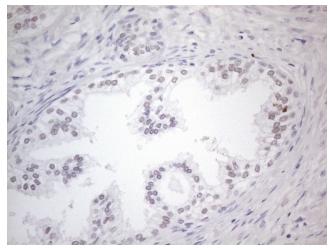


Immunohistochemical staining of paraffinembedded Carcinoma of Human thyroid tissue using anti-TDG mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808610]) (1:150)

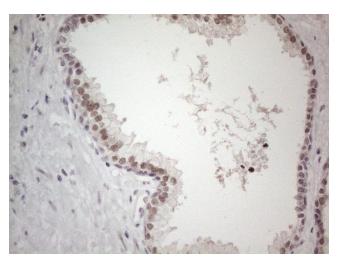




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-TDG mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808610]) (1:150)

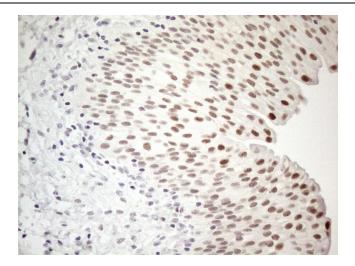


Immunohistochemical staining of paraffinembedded Human prostate tissue within the normal limits using anti-TDG mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808610]) (1:150)

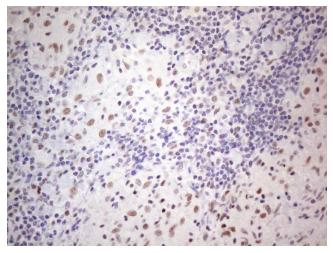


Immunohistochemical staining of paraffinembedded Carcinoma of Human prostate tissue using anti-TDG mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808610]) (1:150)

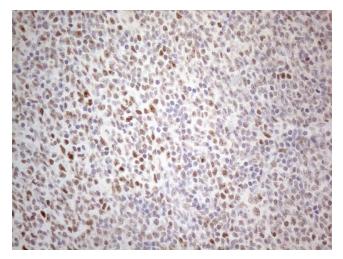




Immunohistochemical staining of paraffinembedded Human bladder tissue within the normal limits using anti-TDG mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808610]) (1:150)

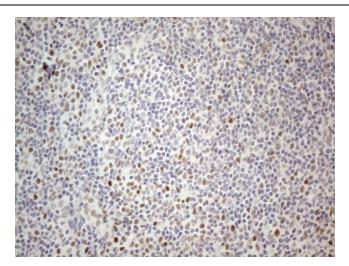


Immunohistochemical staining of paraffinembedded Human lymph node tissue within the normal limits using anti-TDG mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808610]) (1:150)



Immunohistochemical staining of paraffinembedded Human lymphoma 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, [TA808610]) (1:150)





Immunohistochemical staining of paraffinembedded Human tonsil 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, [TA808610]) (1:150)