

## TDG monoclonal antibody

**Other name:** HTDG

**Cat. No.** C15200227

**Type:** Monoclonal

**Source:** Mouse

**Lot #:** 001

**Size:** 50 µg/50 µl

**Concentration:** 1 µg/µl

**Specificity:** Human. Other species: not tested

**Purity:** Affinity purified monoclonal antibody in PBS. Does not contain any preservative.

**Storage:** Store at -20°C; for long storage, store at -80°C. Avoid multiple freeze-thaw cycles

**Precautions:** This product is for research use only. Not for use in diagnostic or therapeutic procedures

**Description:** Monoclonal antibody raised in mouse against TDG (Thymine-DNA glycosylase), using a recombinant protein.

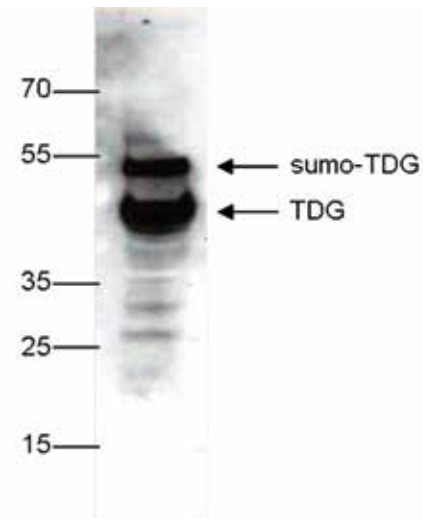
### Applications

	Suggested dilution	Results
Western blotting	1:1,000	Fig 1
Immunofluorescence	1:400	Fig 2

### Target description

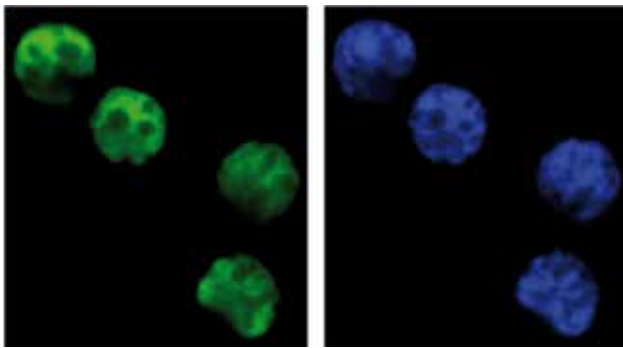
TDG (UniProt/Swiss-Prot entry Q13569) belongs to the TDG/mug DNA glycosylase family. It removes thymine moieties from G/T mismatches by hydrolyzing the carbon-nitrogen bond between the sugar-phosphate backbone of DNA and the mispaired thymine. It is also able to remove thymine from C/T and T/T mispairings, although with lower activity. Further, TDG plays a key role in active DNA demethylation as it binds to 5-formylcytosine (5fC) and 5-carboxylcytosine (5caC), but not 5-hydroxymethylcytosine (5hmC), and mediates their excision through base-excision repair (BER) to install an unmethylated cytosine.

## Results



**Figure 1. Western blot analysis using the Diagenode monoclonal antibody directed against TDG**

Whole cell extracts from HeLa cells were analysed by Western blot using the Diagenode antibody against TDG (Cat. No. C15200227) diluted 1:1,000. The position of the TDG and the sumoylated TDG protein is indicated on the right; the marker (in kDa) is shown on the left.



**Figure 2. Immunofluorescence using the Diagenode monoclonal antibody directed against TDG**

HeLa cells were stained with the Diagenode antibody against TDG (Cat. No. C15200227) diluted 1:400 followed by an anti-mouse antibody conjugated to Alexa488 (left). The right figure shows staining of the nuclei with DAPI.

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