

TECHNICAL DATASHEET

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. Furrther, 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

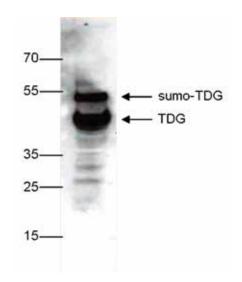


Figure 1. Western blot analysis using the Diagenode monoclonal antibody directed against TDG

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.

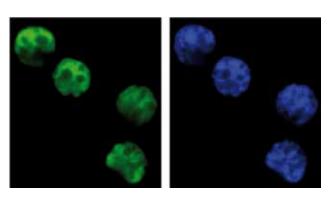


Figure 2. Immunofluorescence using the Diagenode monoclonal antibody directed against TDG

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.