diagenode
A Hologic Company

TECHNICAL DATASHEET

TET2 monoclonal antibody

Cat. No. C15200179
Type: Monoclonal
Isotype: IgG1
Source: Mouse
Lot #: 004
Size: 50 µg/ 50 µl
Concentration: 1 µg/µl

Specificity: Human, mouse: positive
Other species: not tested
Purity: Protein G purified polyclonal antibody in PBS containing 0.05% azide.
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 a recombinant protein containing the N-terminal 300 amino acids of human TET2 (tet oncogene family member 2).

Applications

	Suggested dilution	Results
Western blotting	1:1,000 - 1:2,000	Fig 1, 2
Immunoprecipitation	5 µg per mg of RIPA lysate	Fig 2

Product description

TET2 (UniProt/Swiss-Prot entry Q6N021) is a methylcytosine dioxygenase that catalyzes the conversion of 5-methylcytosine to 5-hydroxymethylcytosine (5-hmC). 5-hmC has been recently discovered in mammalian DNA and is abundant in Purkinje neurons, granule cells, embryonic stem cells, and brain tissue, especially in areas that are associated with higher cognitive function. Although its precise role has still to be shown, recent studies indicate that 5-hmC plays important roles distinct from 5-mC. Early evidence suggests that 5-hmC may represent a new pathway to demethylate DNA involving a repair mechanism converting 5-hmC to cytosine. Mutations in TET2 have been associated with myeloproliferative diseases such as essential thrombocythemia, polycythemia vera and primary myelofibrosis.

Results

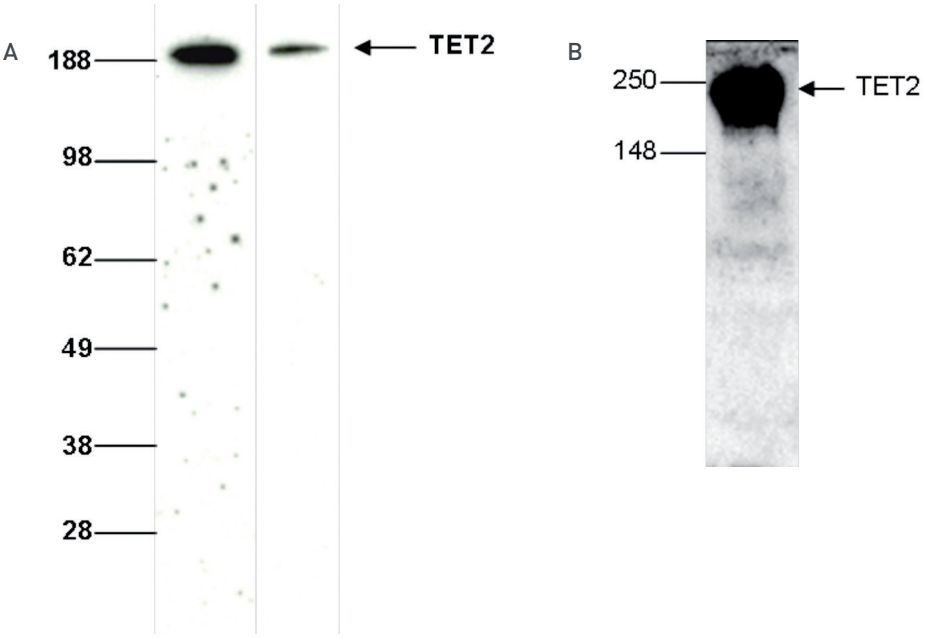

Figure 1. Western blot analysis using the Diagenode monoclonal antibody directed against TET2

Figure 1A. Whole cell extracts from HL60 cells (40 µg) were analysed by Western blot using the Diagenode antibody against TET2 (Cat. No. C15200179), diluted 1:1,000 (lane 1) or 1:2,000 (lane 2) in PBS containing 10% milk. The position of the protein of interest (expected MW 224 kDa) is indicated on the right; the marker (in kDa) is shown on the left.

Figure 1B. Western blot on mouse E14 ES cells. The antibody was used at a dilution of 1:1,000.

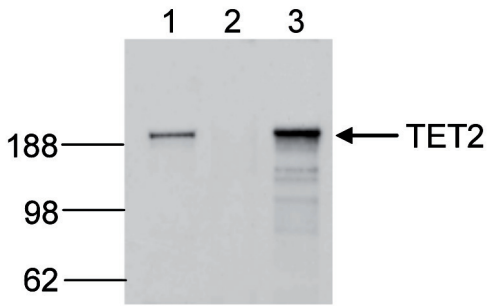

Figure 2. Immunoprecipitation using the Diagenode monoclonal antibody directed against TET2

IP was performed on 250 µg HL60 RIPA cell lysate using the Diagenode antibody against TET2 (Cat. No. MAb-179-050) (lane 3) or an IgG negative control (lane 2). The samples were analysed by Western blot analysis as described above. The input sample (25 µg RIPA lysate) was used as a positive control (lane 1).

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