

DMBT1 (D-20): sc-9573



The Power to Question

BACKGROUND

As human tumors progress to advanced stages, one genetic alteration that occurs at high frequency is a loss of heterozygosity (LOH) at chromosome 10. Mapping of homozygous deletions on this chromosome led to the isolation of the PTEN (also designated MMAC1 and TEP1), DMBT1 (for deleted in malignant brain tumors 1) and LGI1 (for leucine-rich gene-glioma inactivated 1) candidate tumor suppressor genes. The PTEN gene exhibits a high frequency of mutations in human glioblastomas and is also mutated in other cancers, including sporadic brain, breast, kidney and prostate cancers. Reduced levels of DMBT1 mRNA have been noted in gastrointestinal and esophageal cancers as well as in gliomas. LGI1, which is highly specific for neural tissues, shares homology with several transmembrane and extracellular proteins that function as receptors and adhesion proteins.

REFERENCES

1. Bigner, S.H., et al. 1988. Specific chromosomal abnormalities in malignant human gliomas. *Cancer Res.* 48: 405-411.
2. James, C.D., et al. 1988. Clonal genomic alterations in glioma malignancy stages. *Cancer Res.* 48: 5546-5551.
3. Steck, P.A., et al. 1997. Identification of a candidate tumour suppressor gene, MMAC1, at chromosome 10q23.3 that is mutated in multiple advanced cancers. *Nat. Genet.* 15: 356-362.
4. Li, J., et al. 1997. PTEN, a putative protein tyrosine phosphatase gene mutated in human brain, breast, and prostate cancer. *Science* 275: 1943-1947.
5. Mollenhauer, J., et al. 1997. DMBT1, a new member of the SRCR superfamily, on chromosome 10q25.3-q26.1 is deleted in malignant brain tumours. *Nat. Genet.* 17: 32-39.
6. Chernova, O.B., et al. 1998. A novel gene, LGI1, from 10q24 is rearranged and downregulated in malignant brain tumors. *Oncogene* 17: 2873-2881.
7. Mori, M., et al. 1999. Lack of DMBT1 expression in oesophageal, gastric and colon cancers. *Br. J. Cancer* 79: 211-213.

CHROMOSOMAL LOCATION

Genetic locus: DMBT1 (human) mapping to 10q26.13.

SOURCE

DMBT1 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DMBT1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-9573 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

DMBT1 (D-20) is recommended for detection of DMBT1a, DMBT1b and DMBT1c of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for DMBT1 siRNA (h): sc-35196, DMBT1 shRNA Plasmid (h): sc-35196-SH and DMBT1 shRNA (h) Lentiviral Particles: sc-35196-V.

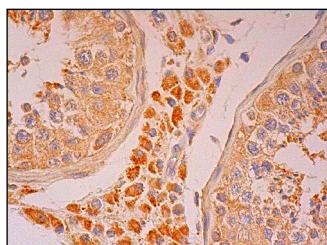
Molecular Weight of DMBT1: 200 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or A-431 whole cell lysate: sc-2201.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



DMBT1 (D-20): sc-9573. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of cells in seminiferous ducts and Leydig cells.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

MONOS
Satisfaction
Guaranteed

Try **DMBT1 (G-4): sc-514566** or **DMBT1 (H-4): sc-514887**, our highly recommended monoclonal alternatives to DMBT1 (D-20).