

MPPED2 (L-20): sc-102027

BACKGROUND

MPPED2 (metallophosphoesterase domain-containing protein 2), also known as C11orf8, FAM1B or 239FB, is a 294 amino acid protein. Expressed primarily in fetal brain tissue, MPPED2 is encoded by a gene that maps to chromosome 11. With approximately 135 million base pairs and 1,400 genes, chromosome 11 makes up around 4% of human genomic DNA and is considered a gene and disease-association dense chromosome. The chromosome 11 encoded ATM gene is important for regulation of cell cycle arrest and apoptosis following double stranded DNA breaks. ATM mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders sickle cell anemia and thalassemia are caused by HBB gene mutations, while Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the WT1 gene. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11.

REFERENCES

- Schwartz, F., et al. 1994. A WAGR region gene between Pax-6 and FSHB expressed in fetal brain. *Hum. Genet.* 94: 658-664.
- Schwartz, F., et al. 1995. cDNA sequence, genomic organization, and evolutionary conservation of a novel gene from the WAGR region. *Genomics* 29: 526-532.
- Schwartz, F. and Ota, T. 1997. The 239AB gene on chromosome 22: a novel member of an ancient gene family. *Gene* 194: 57-62.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 600911. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Grossfeld, P.D., et al. 2004. The 11q terminal deletion disorder: a prospective study of 110 cases. *Am. J. Med. Genet. A* 129: 51-61.
- Loussouarn, G., et al. 2006. KCNQ1 K⁺ channel-mediated cardiac channelopathies. *Methods Mol. Biol.* 337: 167-183.
- Taylor, T.D., et al. 2006. Human chromosome 11 DNA sequence and analysis including novel gene identification. *Nature* 440: 497-500.
- Zehelein, J., et al. 2006. Skipping of Exon 1 in the KCNQ1 gene causes Jervell and Lange-Nielsen syndrome. *J. Biol. Chem.* 281: 35397-35403.
- Ataga, K.I., et al. 2007. β -thalassaemia and sickle cell anaemia as paradigms of hypercoagulability. *Br. J. Haematol.* 139: 3-13.

CHROMOSOMAL LOCATION

Genetic locus: MPPED2 (human) mapping to 11p14.1.

SOURCE

MPPED2 (L-20) is a purified rabbit polyclonal antibody raised against MPPED2 of human origin.

STORAGE

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

APPLICATIONS

MPPED2 (L-20) is recommended for detection of MPPED2 of human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MPPED2 siRNA (h): sc-96737, MPPED2 shRNA Plasmid (h): sc-96737-SH and MPPED2 shRNA (h) Lentiviral Particles: sc-96737-V.

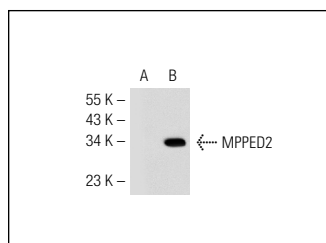
Molecular Weight of MPPED2: 33 kDa.

Positive Controls: MPPED2 (h): 293T Lysate: sc-114350.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



MPPED2 (L-20): sc-102027. Western blot analysis of MPPED2 expression in non-transfected: sc-117752 (A) and human MPPED2 transfected: sc-114350 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **MPPED2 (NO-A35): sc-134391**, our highly recommended monoclonal alternative to MPPED2 (L-20).