CD-MPR (H-251): sc-66826



The Power to Question

BACKGROUND

CD-MPR (cation-dependent mannose-6-phosphate receptor) is an oligomeric transmembrane protein that plays a critical role in the intracellular delivery of phosphorylated lysosomal enzymes from the *trans*-Golgi network (TGN). Intracellular trafficking of CD-MPR is mediated by sorting signals in its 67 amino acid cytoplasmic tail which prevent it from entering the lysosome where it would be degraded. CD-MPR is predominantly expressed in mouse testicular germ cells and shows differentiated expression during maturation of rat spermatozoa. Increased expression of CD-MPR in Alzheimer's disease and the location of the CD-MPR gene next to a region on chromosome 12 which is possibly linked to the disease indicate that CD-MPR may play a role in Alzheimer's disease.

CHROMOSOMAL LOCATION

Genetic locus: M6PR (human) mapping to 12p13.31; M6pr (mouse) mapping to 6 F1.

SOURCE

CD-MPR (H-251) is a rabbit polyclonal antibody raised against amino acids 27-277 mapping at the C-terminus of CD-MPR of human origin.

PRODUCT

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

STORAGE

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

RESEARCH USE

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

APPLICATIONS

CD-MPR (H-251) is recommended for detection of CD-MPR of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

CD-MPR (H-251) is also recommended for detection of CD-MPR in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CD-MPR siRNA (h): sc-45450, CD-MPR siRNA (m): sc-45451, CD-MPR shRNA Plasmid (h): sc-45450-SH, CD-MPR shRNA Plasmid (m): sc-45451-SH, CD-MPR shRNA (h) Lentiviral Particles: sc-45450-V and CD-MPR shRNA (m) Lentiviral Particles: sc-45450-V.

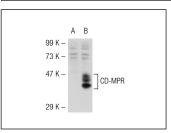
Molecular Weight of CD-MPR: 46 kDa.

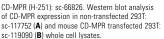
Positive Controls: CD-MPR (m): 293T Lysate: sc-119090, NTERA-2 cl.D1 whole cell lysate: sc-364181 or Jurkat whole cell lysate: sc-2204.

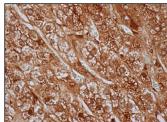
RECOMMENDED SECONDARY REAGENTS

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA







CD-MPR (H-251): sc-66826. Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing cytoplasmic and membrane staining of glandular cells.

SELECT PRODUCT CITATIONS

 Dabrazhynetskaya, A., et al. 2012. Syntaxin 11 marks a distinct intracellular compartment recruited to the immunological synapse of NK cells to colocalize with cytotoxic granules. J. Cell. Mol. Med. 16: 129-141.

PROTOCOLS

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



Try **CD-MPR (H-7):** sc-365196, our highly recommended monoclonal alternative to CD-MPR (H-251).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com