PTP-MEG2 (U-22): sc-130859



The Power to Question

BACKGROUND

Protein tyrosine phosphatases (PTPs) and protein tyrosine kinases (PTKs) play a ubiquitous role in the regulation of tyrosine phosphorylation-mediated signaling pathways. Tyrosine-phosphorylated proteins can be dephosphorylated through the action of PTPs, which therefore are likely to play a regulatory role in the control of cellular growth and differentiation. PTP-MEG2 (also known as PTPN9) is a cytoplasmic nonreceptor protein involved in the transfer of hydrophobic ligands and possibly in functions of the Golgi apparatus. It is involved in the development of erythroid cells and has an N-terminal Sec14p homology domain. The human gene for PTP-PEST, another cytoplasmic nonreceptor protein, maps to chromosome 7q11.23 and encodes a 780 amino acid cytosolic nonreceptor protein. PTP-PEST is expressed abundantly in a wide variety of hemopoietic cell types, including B cells and T cells.

REFERENCES

- Gu, M., et al. 1992. Cloning and expression of a cytosolic megakaryocyte protein-tyrosine-phosphatase with sequence homology to retinaldehydebinding protein and yeast SEC14p. Proc. Natl. Acad. Sci. USA 89: 2980-2984.
- 2. Qi,Y., et al. 2002. Purification and characterization of protein tyrosine phosphatase PTP-MEG2. J. Cell. Biochem. 86: 79-89.

CHROMOSOMAL LOCATION

Genetic locus: PTPN9 (human) mapping to 15q24.2.

SOURCE

PTP-MEG2 (U-22) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of PTP-MEG2 of human origin.

PRODUCT

Each vial contains 100 μg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

PTP-MEG2 (U-22) is recommended for detection of PTP-MEG2 of human 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)], 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 PTP-MEG2 siRNA (h): sc-44670, PTP-MEG2 shRNA Plasmid (h): sc-44670-SH and PTP-MEG2 shRNA (h) Lentiviral Particles: sc-44670-V.

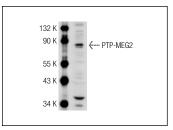
Molecular Weight (predicted) of PTP-MEG2: 68 kDa. Molecular Weight (observed) of PTP-MEG2: 79 kDa.

Positive Controls: A549 cell lysate: sc-2413.

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



PTP-MEG2 (U-22): sc-130859. Western blot analysis of PTP-MEG2 expression in A549 whole cell lysate.

STORAGE

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

PROTOCOLS

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



Try **PTP-MEG2 (D-5): sc-271052**, our highly recommended monoclonal alternative to PTP-MEG2 (U-22).

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