PTP-MEG2 (D-5): sc-271052

**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 are therefore 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 a 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 hematopoietic cell types, including B cells and T cells.

**REFERENCES**

4. Huynh, H., et al. 2003. Homotopic secretory vesicle fusion induced by the 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 hematopoietic cell types, including B cells and T cells.

**APPLICATIONS**

PTP-MEG2 (D-5) is recommended for detection of PTP-MEG2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for PTP-MEG2 siRNA (h): sc-44670, PTP-MEG2 siRNA (m): sc-44671, PTP-MEG2 shRNA Plasmid (h): sc-44670-SH, PTP-MEG2 shRNA Plasmid (m): sc-44671-SH, PTP-MEG2 shRNA (h) Lentiviral Particles: sc-44670-V and PTP-MEG2 shRNA (m) Lentiviral Particles: sc-44671-V.

**CHROMOSOMAL LOCATION**

Genetic locus: PTPN9 (human) mapping to 15q24.2; Ptpn9 (mouse) mapping to 15q24.2.

**SOURCE**

PTP-MEG2 (D-5) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of PTP-MEG2 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PTP-MEG2 (D-5) is available conjugated to agarose (sc-271052 AC), 500 µg/ml agarose in 1 ml, for IP; to HRP (sc-271052 HRP), 200 µg/ml, for WB, IHC (PE) and ELISA; to either phycoerythrin (sc-271052 PE), fluorescein (sc-271052 FITC), Alexa Fluor® 488 (sc-271052 AF488), Alexa Fluor® 546 (sc-271052 AF546), Alexa Fluor® 594 (sc-271052 AF594) or Alexa Fluor® 647 (sc-271052 AF647), 200 µg/ml, for WB (RGB), IF, IHC (PE) and FCM; and to either Alexa Fluor® 680 (sc-271052 AF680) or Alexa Fluor® 790 (sc-271052 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGx BP-HRP: sc-516102 or m-IgGx BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminal Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGx BP-FITC: sc-516140 or m-IgGx BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGx BP-HRP: sc-516102 with DAB, SOX: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

**DATA**

**STORAGE**

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

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