abcam

Product datasheet

Recombinant human VE-PTP protein ab42583

Description

Product name	Recombinant human VE-PTP protein
Biological activity	Specific Activity: 40 U/µg. One unit will hydrolyze 1 nmol p-nitrophenyl phosphate per minute at pH 7.4 and 30°C. Assay buffer: 50 mM HEPES, pH 7.4, 2 mM EDTA, 3mM DTT, 100 mM NaCl, 50 mM pNPP.
Purity	> 95 % SDS-PAGE.
Expression system	Escherichia coli
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	64 kDa including tags
Amino acids	1675 to 1996
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab42583** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Inhibition Assay Functional Studies
Form	Liquid
Additional notes	Protein previously labeled as PTPRB.

Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituents: 0.307% Glutathione, 0.0154% (R*,R*)-1,4-Dimercaptobutan-2,3-diol, 0.395% Tris HCl, 0.05% Tween, 0.0584% EDTA, 50% Glycerol (glycerin, glycerine), 0.435% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function	Plays an important role in blood vessel remodeling and angiogenesis. Not necessary for the initial formation of blood vessels, but is essential for their maintenance and remodeling. Can induce dephosphorylation of TEK/TIE2, CDH5/VE-cadherin and KDR/VEGFR-2. Regulates angiopoietin-TIE2 signaling in endothelial cells. Acts as a negative regulator of TIE2, and controls TIE2 driven endothelial cell proliferation, which in turn affects blood vessel remodeling during embryonic development and determines blood vessel size during perinatal growth. Essential for the maintenance of endothelial cell contact integrity and for the adhesive function of VE-cadherin in endothelial cells and this requires the presence of plakoglobin.
Sequence similarities	Belongs to the protein-tyrosine phosphatase family. Receptor class 3 subfamily. Contains 17 fibronectin type-III domains. Contains 1 tyrosine-protein phosphatase domain.
Cellular localization	Membrane.

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