Recombinant PP16B protein (His tag)

Catalog Number	548055
Synonyms	Ankyrin repeat domain-containing protein 4; CAAX box protein TIMAP; TGF-beta-inhibited membrane-associated protein; hTIMAP
Species	Human
Expression System	E. coli
Accession	Q96T49
Molecular Weight	Predictes a molecular mass of 38.49 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	1-326
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-326 aa (Q96T49) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human PPP1R16B Protein (1-326) is a high-quality, stable fragment of Protein phosphatase 1 regulatory inhibitor subunit 16B (hTIMAP), designed for structural and biochemical research. This soluble fragment supports studies on endothelial barrier regulation, angiogenesis, and PP1-mediated signaling pathways. PPP1R16B, also known as hTIMAP or TGF-beta-inhibited membrane-associated protein, is a key regulator of protein phosphatase 1 (PP1) that enhances pulmonary endothelial cell barrier function and modulates the PI3K/AKT signaling pathway. It plays critical roles in angiogenesis, endothelial cell proliferation, and protection against vascular leakage by regulating ECE1 dephosphorylation and trafficking. The protein localizes to the cell membrane, nucleus, and cell projections, where it interacts with partners like RPSA/LAMR1 and PTEN, and is implicated in PKA-mediated moesin dephosphorylation and EEF1A1 dephosphorylation. As a downstream target of TGF-beta1 signaling, it is essential for maintaining endothelial integrity and function.