Recombinant MELT protein (His tag)

Catalog Number	545004
Synonyms	Protein melted
Species	Human
Expression System	E. coli
Accession	Q14D04
Molecular Weight	Predictes a molecular mass of 35.19 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	545-833
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 545-833 aa (Q14D04) 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 VEPH1 (Protein melted) Fragment (aa 545-833) is a high-purity protein designed for investigating the PH domain's role in key signaling pathways. This 289-amino acid fragment retains the critical PH domain (aa 716-819), making it an essential tool for studying domain-specific interactions in TGF-β, Hippo, and Wnt signaling research. Ventricular zone-expressed PH domain-containing protein homolog 1 (VEPH1), also known as Protein melted, functions as a modulator of TGF-β signaling by interacting with TGF-β receptor type-1 (TGFBR1). It inhibits the dissociation of activated SMAD2 from TGFBR1, impeding SMAD2 nuclear accumulation and thereby attenuating TGF-β signaling. VEPH1 may also influence FOXO, Hippo, and Wnt signaling pathways. The protein is localized to the cell membrane as a peripheral membrane protein on the cytoplasmic side, positioning it strategically for receptor interaction and signal transduction regulation.