Recombinant PITH1 protein (His tag)

Catalog Number	549366
Species	Human
Expression System	E. coli
Accession	Q9GZP4
Molecular Weight	Predictes a molecular mass of 22.29 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	1-180
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 1-180 aa (Q9GZP4) 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 PITH domain-containing protein 1 (PITHD1) fragment (amino acids 1-180) from Homo sapiens, designed for structural and biochemical studies. This fragment represents a stable, soluble unit of the protein, ideal for investigating its role in promoting megakaryocyte differentiation through RUNX1 regulation. The full-length PITH domain-containing protein 1, encoded by the PITHD1 gene in humans, plays a critical role in megakaryocyte differentiation by up-regulating RUNX1 expression. It achieves this through dual mechanisms: activating the proximal promoter of the RUNX1 gene and enhancing translation via an internal ribosome entry site (IRES) element within RUNX1. Located in the cytoplasm, this protein is essential for hematopoietic processes, with implications for understanding blood cell development and related disorders. The provided fragment (1-180) was selected computationally to ensure stability and solubility, facilitating experimental analysis of its functional domains.