Recombinant PHAR1 protein (His tag)

Catalog Number	543563
Species	Human
Expression System	E. coli
Accession	Q9C0D0
Molecular Weight	Predictes a molecular mass of 22.01 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	412-580
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 412-580 aa (Q9C0D0) 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 Phosphatase and actin regulator 1 (PHACTR1) Fragment (aa 412-580) - A high-quality, stable protein fragment specifically designed for structural and biochemical studies of actin cytoskeleton regulation and cell motility mechanisms. Phosphatase and actin regulator 1 (PHACTR1) is a multifunctional protein that binds actin monomers and plays crucial roles in regulating actin cytoskeleton dynamics, actin stress fiber formation, cell motility, and cell survival. It is also involved in endothelial cell tubule formation and regulates PPP1CA phosphatase activity. Research indicates PHACTR1 contributes to cortical neuron migration and dendrite arborization processes. The protein localizes to the cytoplasm, synapses, and nucleus, with enrichment at synaptic regions. Interestingly, PHACTR1 remains cytoplasmic in resting cells but translocates to the nucleus upon serum stimulation, while actin binding prevents this nuclear import. The selected fragment (amino acids 412-580) represents a stable, soluble unit optimized for experimental applications in studying these fundamental cellular processes.