Recombinant ARFP2 protein (His tag)

Catalog Number	537827
Synonyms	ADP-ribosylation factor-interacting protein 2; Partner of RAC1; POR1
Species	Human
Expression System	E. coli
Accession	P53365
Molecular Weight	Predictes a molecular mass of 30.81 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 32 kDa band.

Product Information

Sequence Region	87-341
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 87-341 aa (P53365) 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 Arfaptin-2 Fragment (aa 87-341) is a high-purity protein designed for studying the specific functions of its amphipathic helix (AH) domain. This fragment, derived from the Arfaptin-2 protein (also known as POR1), is an essential tool for investigating vesicle trafficking, autophagy, and metalloproteinase secretion mechanisms in cellular research. Arfaptin-2 (ADP-ribosylation factor-interacting protein 2) is a human protein that plays critical roles in cellular transport and signaling pathways. It functions in constitutive metalloproteinase (MMP) secretion from the trans Golgi network, particularly supporting the trafficking of MMP7 and MMP2. Additionally, Arfaptin-2 regulates autophagy by controlling the starvation-dependent movement of ATG9A vesicles, which deliver phosphatidylinositol 4-kinase beta to autophagosome initiation sites, and facilitates phagophore growth during mitophagy. The protein also contributes to NF-kappa-B inhibition through interactions with IKBKB and IKBKG. Located primarily in the Golgi apparatus and trans-Golgi network membrane, Arfaptin-2 operates at key cargo subdomains essential for vesicle biogenesis and cellular homeostasis.