Recombinant PHLA3 protein (His tag)

Catalog Number	541630
Synonyms	TDAG51/Ipl homolog 1
Species	Human
Expression System	E. coli
Accession	Q9Y5J5
Molecular Weight	Predictes a molecular mass of 15.54 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	1-127
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-127 aa (Q9Y5J5) 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 PHLDA3 (1-127) is a high-quality protein fragment encompassing the complete Pleckstrin homology-like domain (PH domain) of PHLDA3. This fragment serves as an essential tool for investigating the molecular mechanisms of Akt signaling regulation and p53-mediated apoptosis pathways. PHLDA3 (Pleckstrin homology-like domain family A member 3) is a p53/TP53-regulated repressor of Akt/AKT1 signaling that functions by preventing AKT1-binding to membrane lipids, thereby inhibiting AKT1 translocation to the cellular membrane and subsequent activation. This protein contributes to p53/TP53-dependent apoptosis through its repression of AKT1 activity, and its direct transcriptional regulation by p53/TP53 provides a mechanism for how p53 can negatively regulate AKT1. PHLDA3 is localized in both the cytoplasm and at the cellular membrane as a peripheral membrane protein, and evidence suggests it may function as a tumor suppressor. The provided fragment (amino acids 1-127) contains the complete PH domain, which is critical for the protein's function in membrane lipid binding and Akt signaling regulation.