Recombinant DIK2A protein (His tag)

Catalog Number	547779
Synonyms	Deleted in autism protein 1; Golgi Protein of 49 kDa; GoPro49; Hypoxia and AKT-induced stem cell factor; HASF
Species	Human
Expression System	E. coli
Accession	Q8NDZ4
Molecular Weight	Predictes a molecular mass of 47.30 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 49 kDa band.

Product Information

Sequence Region	36-430
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 36-430 aa (Q8NDZ4) 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	Introducing the recombinant Divergent protein kinase domain 2A (DIPK2A) fragment (amino acids 36-430), a stable and soluble protein unit designed for structural and biochemical studies. This fragment, derived from Homo sapiens, represents a key functional region implicated in cardiomyocyte proliferation through paracrine signaling and activation of the PI3K-AKT-CDK7 cascade, offering researchers a reliable tool for investigating cardiac development and signaling pathways. The full-length Divergent protein kinase domain 2A (also known as Deleted in autism protein 1, Golgi Protein of 49 kDa, or Hypoxia and AKT-induced stem cell factor) is a human protein that plays a critical role in promoting cardiomyocyte proliferation. It functions through paracrine signaling mechanisms, activating the PI3K-AKT-CDK7 signaling cascade, which is essential for cardiac cell growth and regeneration. The protein is primarily localized to cytoplasmic vesicles, specifically COPI-coated vesicles, and the Golgi apparatus, from where it can be secreted to exert its effects. This strategic subcellular distribution supports its role in intracellular trafficking and extracellular signaling functions relevant to cardiovascular biology and potential therapeutic applications.