Recombinant DAAM1 protein (His tag)

Catalog Number	546320
Species	Human
Expression System	E. coli
Accession	Q9Y4D1
Molecular Weight	Predictes a molecular mass of 47.30 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 54 kDa band.

Product Information

Sequence Region	685-1078
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 685-1078 aa (Q9Y4D1) 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 DAAM1 Fragment (aa 685-1078) - A high-purity protein fragment containing the DAD functional domain of Disheveled-associated activator of morphogenesis 1, ideal for studying Wnt signaling pathways, actin cytoskeleton regulation, and cilia formation mechanisms. DAAM1 (Disheveled-associated activator of morphogenesis 1) is a key scaffolding protein that binds to disheveled (Dvl) and Rho, mediating Wnt-induced Dvl-Rho complex formation. It plays a crucial role in enhancing Rho-GTP formation by recruiting Rho-GDP and Rho-GEF, and can direct nucleation and elongation of new actin filaments. The protein is involved in building functional cilia and organizing subapical actin networks in multiciliated epithelial cells. DAAM1 also contributes to myocardial maturation and sarcomere assembly in conjunction with DAAM2, and regulates RHOA activation during cell division for proper spindle orientation and chromosomal segregation. Subcellular localization studies show DAAM1 is primarily cytoplasmic, with specific localization to the cytoskeleton and cilium basal body, and perinuclear distribution with colocalization around centrosomes.