Recombinant DAAM2 protein (His tag)

Catalog Number	543033
Species	Human
Expression System	E. coli
Accession	Q86T65
Molecular Weight	Predictes a molecular mass of 55.87 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 61 kDa band.

Product Information

Sequence Region	41-503
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 41-503 aa (Q86T65) 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 DAAM2 (Disheveled-associated activator of morphogenesis 2) Fragment (aa 41-503) is a high-quality, soluble protein designed for structural and functional studies. This 463-amino acid fragment retains key properties for investigating DAAM2's critical roles in Wnt signaling pathways, actin dynamics, and developmental processes. DAAM2 is a key regulator of both canonical and non-canonical Wnt signaling pathways, essential for multiple developmental processes including dorsal patterning, left/right symmetry determination, central nervous system myelination, and myocardial maturation. The protein functions downstream of Wnt ligands and upstream of beta-catenin in canonical Wnt signaling, promoting Disheveled complex aggregation and Wnt receptor signalosome formation. In non-canonical pathways, DAAM2 regulates actin nucleation and elongation, filopodia formation, and podocyte migration. During gut development, it mediates mesenchymal condensation through WNT5A signaling to establish left/right asymmetry. DAAM2 also interacts with PIP5K1A to inhibit oligodendrocyte differentiation in spinal cord patterning. The provided fragment (aa 41-503) represents a stable, soluble unit optimized for biochemical and structural analyses of these important functions.