Recombinant ADDB protein (His tag)

Catalog Number	546938
Synonyms	Erythrocyte adducin subunit beta
Species	Human
Expression System	E. coli
Accession	P35612
Molecular Weight	Predictes a molecular mass of 44.76 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band.

Product Information

Sequence Region	1-385
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 1-385 aa (P35612) 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 Beta-adducin (Erythrocyte adducin subunit beta) fragment (residues 1-385) from Homo sapiens, a stable and soluble protein unit ideal for structural and biochemical studies of membrane-cytoskeleton interactions. Beta-adducin, encoded by the ADD2 gene, is a membrane-cytoskeleton-associated protein that promotes assembly of the spectrin-actin network, crucial for maintaining cytoskeletal integrity. It binds to the erythrocyte membrane receptor SLC2A1/GLUT1, linking the spectrin cytoskeleton to the plasma membrane, and interacts with calmodulin, with calmodulin showing preferential binding to the beta subunit. The protein is localized to the cytoplasm, cytoskeleton, and the cytoplasmic side of the cell membrane as a peripheral membrane protein, underscoring its role in bridging membrane and cytoskeletal components.