Recombinant ADIP protein (His tag)

Catalog Number	548552
Synonyms	ADIP; Afadin DIL domain-interacting protein; SSX2-interacting protein
Species	Human
Expression System	E. coli
Accession	Q9Y2D8
Molecular Weight	Predictes a molecular mass of 21.13 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 23 kDa band.

Product Information

Sequence Region	55-218
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 55-218 aa (Q9Y2D8) 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 Afadin- and alpha-actinin-binding protein (ADIP) fragment (amino acids 55-218) is a high-purity, stable protein designed for structural and biochemical studies. This fragment, derived from the SSX2IP gene, represents a soluble unit ideal for investigating cell adhesion, cytoskeletal organization, and centrosome function. The full-length ADIP protein plays a critical role in organizing homotypic and heterotypic cell-cell adherens junctions by connecting the nectin-afadin and E-cadherin-catenin systems through alpha-actinin, contributing to actin cytoskeleton organization. It is involved in cell movement, localizing to the leading edge in response to PDGF and promoting motility via Rac signaling. Additionally, ADIP functions as a centrosome maturation factor, maintaining pericentriolar integrity and microtubule nucleation at mitotic spindle poles, and is essential for ciliogenesis by recruiting key components like the BBSome and CEP290 to cilia. It localizes to adherens junctions, the nucleus, centrosome, centriolar satellites, and the cilium basal body, underscoring its multifunctional role in cellular architecture and signaling.