Recombinant CTNA2 protein (His tag)

Catalog Number	544514
Synonyms	Alpha N-catenin; Alpha-catenin-related protein
Species	Human
Expression System	E. coli
Accession	P26232
Molecular Weight	Predictes a molecular mass of 15.90 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	667-794
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 667-794 aa (P26232) 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 Catenin alpha-2 (Alpha N-catenin) Fragment (residues 667-794) is a 128-amino acid protein designed for structural and biochemical studies. This fragment offers a stable and soluble unit ideal for investigating the protein's role in cell adhesion, cytoskeletal regulation, and neuronal development. Catenin alpha-2, encoded by the CTNNA2 gene, functions as a linker between cadherin adhesion receptors and the cytoskeleton, playing a critical role in regulating cell-cell adhesion and differentiation in the nervous system. It is essential for proper cortical neuronal migration, neurite growth, and morphological plasticity of synapses. The protein acts as a negative regulator of Arp2/3 complex activity, suppressing excessive actin branching to maintain neurite stability. It localizes to the cell membrane (cytoplasmic side), cytoplasm, cytoskeleton, adherens junctions, axons, and the nucleus, underscoring its diverse roles in cellular architecture and signaling pathways during development.