Recombinant BICD2 protein (His tag)

Catalog Number	543229
Synonyms	Bic-D 2
Species	Human
Expression System	E. coli
Accession	Q8TD16
Molecular Weight	Predictes a molecular mass of 32.64 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 41 kDa band.

Product Information

Sequence Region	2-263
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 2-263 aa (Q8TD16) 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 Protein Bicaudal D Homolog 2 (Bic-D 2) Fragment (aa 2-263) is a high-purity, stable protein designed for structural and biochemical studies. This fragment represents a soluble unit of Bic-D 2, a key adapter protein that links the dynein motor complex to cargos and enhances dynein processivity, making it an essential tool for investigating intracellular transport mechanisms. Protein Bicaudal D Homolog 2 (Bic-D 2), encoded by the BICD2 gene, functions as an adapter protein that connects the dynein motor complex to various cargos and, in conjunction with dynactin, converts dynein into a highly processive motor. It facilitates COPI-independent Golgi-endoplasmic reticulum transport by stabilizing GTP-bound RAB6A and recruiting the dynein-dynactin complex. Additionally, Bic-D 2 contributes to nuclear and centrosomal positioning prior to mitosis by regulating dynein and kinesin-1. The protein localizes primarily to the Golgi apparatus, cytoplasm, cytoskeleton, nuclear envelope, and nuclear pore complex, with its presence at annulate lamellae during G2 phase being RANBP2-dependent. This recombinant fragment (aa 2-263) is computationally selected for stability and solubility, enabling detailed exploration of Bic-D 2's functional domains.