Recombinant DC2L1 protein (His tag)

Catalog Number	540829
Synonyms	Dynein 2 light intermediate chain
Species	Human
Expression System	E. coli
Accession	Q8TCX1
Molecular Weight	Predictes a molecular mass of 41.28 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	1-351
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 1-351 aa (Q8TCX1) 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 Cytoplasmic Dynein 2 Light Intermediate Chain 1 (DYNC2LI1) Fragment (residues 1-351) – a high-quality protein fragment designed for structural and biochemical studies. This stable, soluble unit retains key functional regions, enabling researchers to investigate the molecular mechanisms of intraflagellar transport and ciliary dynamics. Cytoplasmic dynein 2 light intermediate chain 1, encoded by the DYNC2LI1 gene, is a non-catalytic accessory component of the cytoplasmic dynein 2 complex. This motor protein complex drives cargo transport along microtubules within cilia and flagella as part of the intraflagellar transport (IFT) system, which is essential for ciliary assembly and maintenance. The protein also plays a role in regulating ciliary length. It localizes to multiple subcellular compartments, including the Golgi apparatus, cytoplasm, cilium (specifically the basal body and axoneme), and centrosome, highlighting its involvement in microtubule-based transport and organelle organization. The provided recombinant fragment (residues 1-351) represents a computationally selected stable domain, facilitating experimental analysis of dynein-2 complex function in ciliary biology.