Recombinant DC2I1 protein (His tag)

Catalog Number	545559
Synonyms	Dynein 2 intermediate chain 1; WD repeat-containing protein 60
Species	Human
Expression System	E. coli
Accession	Q8WVS4
Molecular Weight	Predictes a molecular mass of 55.26 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 55 kDa band.

Product Information

Sequence Region	582-1066
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 582-1066 aa (Q8WVS4) 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 Intermediate Chain 1 (DYNC2I1) Fragment (aa 582-1066) – a high-quality protein fragment engineered for stability and solubility, ideal for investigating the molecular mechanisms of retrograde ciliary transport and microtubule-based motility. Cytoplasmic dynein 2 intermediate chain 1, encoded by the gene DYNC2I1, is a non-catalytic accessory component of the cytoplasmic dynein 2 complex. This motor protein complex drives retrograde cargo transport along microtubules within cilia and flagella, operating in coordination with the intraflagellar transport (IFT) system. DYNC2I1 is essential for maintaining functional ciliary protein trafficking and transition zone integrity, with implications for cellular signaling and motility. The protein localizes to the cilium, centrosome, and microtubule organizing center, particularly enriched at the base of primary cilia. The recombinant fragment (aa 582-1066) represents a structurally stable region, facilitating studies on dynein-2 complex assembly and ciliary dysfunction mechanisms.