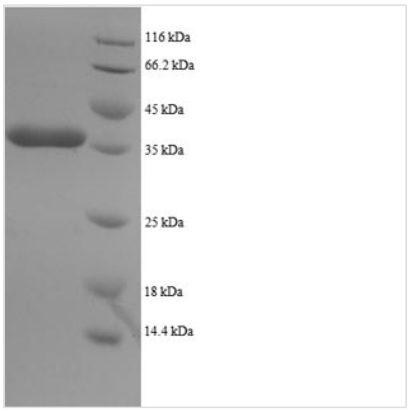
Recombinant Human Dynein light chain 1, Cytoplasmic domain (DYNLL1)

Product Code	CSB-RP012844h
Relevance	Acts as one of several non-catalytic accessory components of the Cytoplasmic domain dynein 1 complex that are thought to be involved in linking dynein to cargos and to adapter proteins that regulate dynein function. Cytoplasmic domain dynein 1 acts as a motor for the intracellular retrograde motility of vesicles and organelles along microtubules. May play a role in changing or maintaining the spatial distribution of cytoskeletal structures.Binds and inhibits the catalytic activity of neuronal nitric oxide synthase.Promotes transactivation functions of ESR1 and plays a role in the nuclear localization of ESR1.Regulates apoptotic activities of BCL2L11 by sequestering it to microtubules. Upon apoptotic stimuli the BCL2L11-DYNLL1 complex dissociates from Cytoplasmic domain dynein and translocates to mitochondria and sequesters BCL2 thus neutralizing its antiapoptotic activity.
Abbreviation	Recombinant Human DYNLL1 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P63167
Alias	8 kDa dynein light chain ;DLC8Dynein light chain LC8-type 1;Protein inhibitor of neuronal nitric oxide synthase ;PIN
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MCDRKAVIKNADMSEEMQQDSVECATQALEKYNIEKDIAAHIKKEFDKKYNPT WHCIVGRNFGSYVTHETKHFIYFYLGQVAILLFKSG
Research Area	Apoptosis
Source	E.coli
Target Names	DYNLL1
Expression Region	1-89aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal GST-tagged
Mol. Weight	37.4kDa
Protein Length	Full Length

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The recombinant Human DYNLL1 protein synthesis in e.coli cells necessitates the incorporation of a DNA fragment encoding the Human DYNLL1 protein (1-89aa) into a plasmid vector, followed by the transformation of this vector into e.coli cells. After screening for positive cells, they are cultured and induced to express the DYNLL1 protein. The protein carries a N-terminal GST tag. Cell lysis is performed to gather the recombinant Human DYNLL1 protein, which undergoes affinity purification and is then analyzed using SDS-PAGE and subsequent staining of the gel with Coomassie Brilliant Blue. The purity of the resulting recombinant Human DYNLL1 protein reaches up to 90%.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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