Recombinant KLC2 protein (His tag)

Catalog Number	541219
Synonyms	KLC 2
Species	Human
Expression System	E. coli
Accession	Q9H0B6
Molecular Weight	Predictes a molecular mass of 33.98 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 36 kDa band.

Product Information

Sequence Region	192-476
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 192-476 aa (Q9H0B6) 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	This recombinant protein product features a stable and soluble fragment (residues 192-476) of human Kinesin light chain 2 (KLC2), designed for structural and biochemical studies. It represents a key functional region of KLC2, which plays a critical role in intracellular transport by linking cargo to the kinesin motor complex. Kinesin light chain 2 (KLC2), encoded by the KLC2 gene in Homo sapiens, functions as part of the kinesin motor protein complex involved in microtubule-associated force production and organelle transport. It facilitates cargo coupling to the kinesin heavy chain and modulates ATPase activity. Notably, KLC2 interacts with PLEKHM2 and ARL8B to recruit kinesin-1 to lysosomes, directing their movement toward microtubule plus ends. The protein localizes to the cytoplasm, cytoskeleton, and lysosome membrane, where it acts as a peripheral membrane protein on the cytoplasmic side, underscoring its importance in cellular logistics and membrane trafficking pathways.