Recombinant KI13A protein (His tag)

Catalog Number	548216
Synonyms	Kinesin-like protein RBKIN
Species	Human
Expression System	E. coli
Accession	Q9H1H9
Molecular Weight	Predictes a molecular mass of 20.47 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	669-832
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 669-832 aa (Q9H1H9) 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 KIF13A (669-832) is a high-quality protein fragment derived from human Kinesin-like protein KIF13A, designed for structural and biochemical studies. This 164-amino acid fragment offers a stable and soluble unit ideal for investigating the molecular mechanisms of intracellular transport and cytokinesis regulation. KIF13A is a plus end-directed microtubule-dependent motor protein essential for intracellular transport processes in human cells. It facilitates the movement of mannose-6-phosphate receptor-containing vesicles from the trans-Golgi network to the plasma membrane through direct interaction with the AP-1 complex. Additionally, KIF13A plays a critical role in melanosome biogenesis by enabling the delivery of melanogenic enzymes from recycling endosomes to nascent melanosomes and supports cytokinesis by mediating the translocation of proteins like ZFYVE26 to the midbody during abscission. The protein localizes to the cytoplasm, cytoskeleton, microtubule organizing center, centrosome, endosome membrane, Golgi apparatus membrane, and is recruited to the midbody during cell division, underscoring its importance in cellular organization and trafficking.