Recombinant KI18B protein (His tag)

Catalog Number	547658
Species	Human
Expression System	E. coli
Accession	Q86Y91
Molecular Weight	Predictes a molecular mass of 45.22 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band.

Product Information

Sequence Region	1-391
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-391 aa (Q86Y91) 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	Introducing the recombinant Kinesin-like protein KIF18B (1-391) fragment, a high-quality tool designed to study the motor domain of human KIF18B. This product encompasses the critical kinesin motor domain (residues 7-351), enabling researchers to investigate microtubule dynamics and depolymerization mechanisms in cellular processes. KIF18B is a human protein that, in complex with KIF2C, serves as the primary microtubule plus-end depolymerizing activity in mitotic cells. It plays a key role in transporting KIF2C and/or MAPRE1 along microtubules, contributing to mitotic regulation. During interphase, KIF18B localizes predominantly in the nucleus and to a lesser extent in the cytoplasm, while in mitosis, it associates closely with astral microtubule plus ends during prometaphase and metaphase, highlighting its importance in spindle dynamics and cell division.