Recombinant RAB37 protein (His tag)

Catalog Number	540944
Species	Human
Expression System	E. coli
Accession	Q96AX2
Molecular Weight	Predictes a molecular mass of 25.97 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 27 kDa band.

Product Information

Sequence Region	2-220
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 2-220 aa (Q96AX2) 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 Ras-related protein Rab-37 (EC 3.6.5.2) fragment (amino acids 2-220) is a high-quality, soluble protein designed for structural and biochemical studies. This fragment captures the essential GTPase domain, enabling researchers to investigate Rab-37's critical roles in intracellular membrane trafficking and autophagosome biogenesis with reliability and precision. Ras-related protein Rab-37 is a small GTPase that functions as a key regulator of intracellular membrane trafficking, cycling between inactive GDP-bound and active GTP-bound states to coordinate vesicle formation, movement, tethering, and fusion. Recent research highlights its role as an organizer of autophagosome biogenesis in a GTP-dependent manner, which is essential for maintaining retinal homeostasis through autophagy regulation. Subcellularly, Rab-37 localizes to cytoplasmic vesicles, secretory granules, and cell projections such as cilia, with specific presence in retinal structures like connecting cilia and neural layers, underscoring its importance in cellular transport and ocular function.