Recombinant SEP14 protein (His tag)

Catalog Number	545264
Species	Human
Expression System	E. coli
Accession	Q6ZU15
Molecular Weight	Predictes a molecular mass of 47.96 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 52 kDa band.

Product Information

Sequence Region	35-432
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 35-432 aa (Q6ZU15) 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 Septin-14 (35-432) is a high-purity protein fragment encompassing the critical Septin-type G domain (residues 49-315). This product is engineered for researchers studying cytoskeletal GTPase functions, neuronal migration, and spermiogenesis mechanisms, providing a targeted tool for domain-specific investigations. Septin-14 is a filament-forming cytoskeletal GTPase implicated in cortical neuron migration and the formation of neuron leading processes during embryonic development. It also plays a vital role in sperm head formation during spermiogenesis, potentially by facilitating the localization of ACTN4 to cell filaments. The protein localizes to the cytoplasm, cytoskeleton, axons, dendrites, perikaryon, perinuclear region, and acrosomal vesicles in secretory pathways, where it colocalizes with actin stress fibers and manchette structures in developing spermatids.