Recombinant SEC13 protein (His tag)

Catalog Number	533463
Synonyms	CeSEH13R; GATOR complex protein SEC13; Nuclear pore complex protein 20
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q9N4A7
Gene ID	176957
Molecular Weight	Predictes a molecular mass of 36.35 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 36 kDa band.

Product Information

Sequence Region	1-313
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 1-313 aa (Q9N4A7) 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 Protein SEC13 homolog (CeSEH13R) fragment (residues 1-313) from Caenorhabditis elegans, a key component of the nuclear pore complex and COPII coat. This stable, soluble fragment is ideal for structural studies, biochemical assays, and investigating nuclear transport and vesicular trafficking mechanisms. Protein SEC13 homolog (CeSEH13R), encoded by the npp-20 gene, functions as a critical component of both the nuclear pore complex (NPC) and the COPII coat. It is essential for the nuclear import of hcp-4 during mitotic prophase, a step required for centrosome assembly and resolution. Additionally, as part of the GATOR complex, it contributes to the amino acid-sensing branch of the TORC1 signaling pathway. The protein localizes to cytoplasmic vesicles (COPII-coated vesicles), endoplasmic reticulum membranes, the nuclear pore complex, and lysosome membranes, primarily on the cytoplasmic side, and is found near endoplasmic reticulum exit sites and nuclear envelopes in proliferating germ nuclei, underscoring its roles in intracellular transport and regulatory processes.