Recombinant HAP40 protein (His tag)

Catalog Number	546859
Synonyms	HAP40; CpG island protein; Factor VIII intron 22 protein
Species	Human
Expression System	E. coli
Accession	P23610
Molecular Weight	Predictes a molecular mass of 24.08 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	2-215
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 2-215 aa (P23610) 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 40-kDa huntingtin-associated protein (HAP40) fragment (amino acids 2-215) is a high-quality protein preparation ideal for studying vesicular trafficking mechanisms and early endosome dynamics. This 214-amino acid fragment represents a stable, soluble unit optimized for structural and biochemical applications. HAP40 (F8A1/F8A2/F8A3) functions as a RAB5A effector molecule that plays a critical role in vesicular trafficking within early endosomes. It mediates the recruitment of huntingtin (HTT) by RAB5A onto early endosomal membranes, forming a complex that stimulates actin filament interactions while inhibiting microtubule associations, thereby reducing endosome motility. The protein exhibits dynamic subcellular localization, with diffuse cytoplasmic presence, nuclear accumulation, and specific colocalization with HTT in endosomes. In neuronal cells, it associates with ubiquitin in intranuclear rodlets, suggesting additional regulatory functions in nuclear organization.