Recombinant AP1S1 protein (His tag)

Catalog Number	542456
Synonyms	Adaptor protein complex AP-1 subunit sigma-1A; Adaptor-related protein complex 1 subunit sigma-1A; Clathrin assembly protein complex 1 sigma-1A small chain; Clathrin coat assembly protein AP19; Golgi adaptor HA1/AP1 adaptin sigma-1A subunit; HA1 19 kDa subunit; Sigma 1a subunit of AP-1 clathrin; Sigma-adaptin 1A; Sigma1A-adaptin
Species	Human
Expression System	E. coli
Accession	P61966
Molecular Weight	Predictes a molecular mass of 20.39 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	1-158
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 1-158 aa (P61966) 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 AP-1 complex subunit sigma-1A fragment (amino acids 1-158) from Homo sapiens, representing a stable and soluble unit of this essential clathrin-associated adaptor protein complex component, ideal for structural and biochemical studies of intracellular protein sorting mechanisms. AP-1 complex subunit sigma-1A is a crucial component of the clathrin-associated adaptor protein complex 1 that mediates protein sorting in the late-Golgi/trans-Golgi network (TGN) and endosomes. The AP complexes facilitate both clathrin recruitment to membranes and recognition of sorting signals within the cytosolic tails of transmembrane cargo molecules. This protein localizes to the Golgi apparatus, cytoplasmic vesicle membranes, and clathrin-coated pits, where it forms part of the coat surrounding the cytoplasmic face of coated vesicles at the Golgi complex, playing a fundamental role in intracellular trafficking and membrane transport processes.