# Recombinant AP3S2 protein (His tag)

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| **Catalog Number** | 540090 |
| **Synonyms** | AP-3 complex subunit sigma-3B; Adaptor-related protein complex 3 subunit sigma-2; Sigma-3B-adaptin; Sigma3B-adaptin; Sigma-adaptin 3b |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | P59780 |
| **Molecular Weight** | Predictes a molecular mass of 19.31 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band. |

## Product Information

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| **Sequence Region** | 1-151 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >90%, 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 1-151 aa (P59780) were fused with 6His tag. |

## Storage & Handling

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| **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.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

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| **Description** | Recombinant AP-3 complex subunit sigma-2 (AP3S2) fragment (amino acids 1-151) from Homo sapiens, a key adaptor protein involved in intracellular vesicle trafficking. This fragment is computationally optimized for stability and solubility, making it ideal for structural studies and biochemical assays.<br>The full-length AP-3 complex subunit sigma-2 is a component of the AP-3 adaptor complex, which facilitates vesicle budding from the Golgi apparatus and is implicated in cargo trafficking to lysosomes. It collaborates with the BLOC-1 complex to direct cargos into vesicles for transport to neurites and nerve terminals. The protein localizes to the Golgi apparatus and cytoplasmic vesicle membranes, functioning as a peripheral membrane protein on the cytoplasmic side of coated vesicles at the Golgi complex, underscoring its role in membrane dynamics and organelle-specific transport pathways. |