Recombinant CSN5 protein (His tag)

Catalog Number	540918
Synonyms	SGN5; Signalosome subunit 5; Jun activation domain-binding protein 1
Species	Human
Expression System	E. coli
Accession	Q92905
Molecular Weight	Predictes a molecular mass of 39.11 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	2-334
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 2-334 aa (Q92905) 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	Introducing the recombinant human COP9 signalosome complex subunit 5 (SGN5) fragment, encompassing amino acids 2-334. This product includes the essential MPN domain, making it an invaluable tool for investigating the proteolytic functions and regulatory mechanisms of the COP9 signalosome complex in ubiquitin-mediated pathways. The full-length COP9 signalosome complex subunit 5 (COPS5) is a critical component of the COP9 signalosome (CSN), a multi-subunit complex that regulates numerous cellular and developmental processes. As a probable protease subunit, COPS5 plays a central role in the deneddylation of cullin subunits in SCF-type E3 ubiquitin ligase complexes, thereby modulating ubiquitin conjugation and protein degradation. The CSN complex is also implicated in the phosphorylation of key regulatory proteins such as p53/TP53 and c-jun/JUN, influencing their stability and activity. COPS5 interacts directly with many proteins regulated by the CSN, underscoring its importance in cellular signaling. It is localized in the cytoplasm, cytosol, nucleus, perinuclear region, and synaptic vesicles, with nuclear localization affected by factors like IFIT3. This recombinant fragment allows focused study on the MPN domain's role in these complex regulatory networks.