Recombinant PCID2 protein (His tag)

Catalog Number	532970
Synonyms	CSN12-like protein
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9VTL1
Gene ID	39306
Molecular Weight	Predictes a molecular mass of 46.84 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 47 kDa band.

Product Information

Sequence Region	1-395
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 1-395 aa (Q9VTL1) 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 Drosophila melanogaster PCI domain-containing protein 2 homolog (PCID2) fragment (amino acids 1-395) encompassing the complete PCI functional domain. This high-purity protein is an essential research tool for investigating nuclear mRNA export mechanisms and cytoplasmic mRNA trafficking pathways. The full-length PCI domain-containing protein 2 homolog (CSN12-like protein) is a crucial component of the nuclear pore complex-associated TREX-2/AMEX complex, which docks export-competent ribonucleoprotein particles to the nuclear basket, enabling mRNA export to the cytoplasm. Beyond its nuclear role, PCID2 functions independently in the cytoplasm to promote mRNA trafficking in association with microtubules and translationally active polysomes. The protein exhibits dynamic subcellular localization, shuttling between nucleus and cytoplasm through an emb/Crm1-dependent mechanism, with ubiquitinated forms localized primarily to the cytoplasm and non-ubiquitinated forms in the nucleus. Its association with both nuclear and cytoplasmic mRNA complexes makes it a key regulator of gene expression at multiple levels.