Recombinant PDE4 protein (His tag)

Catalog Number	533352
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q22000
Gene ID	174235
Molecular Weight	Predictes a molecular mass of 43.47 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 46 kDa band.

Product Information

Sequence Region	314-674
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 314-674 aa (Q22000) 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 Probable 3',5'-cyclic-AMP phosphodiesterase pde-4 (EC 3.1.4.53) fragment (residues 314-674) from Caenorhabditis elegans. This high-purity fragment fully encompasses the PDEase catalytic domain, providing an ideal tool for investigating cAMP hydrolysis mechanisms and domain-specific functions in cellular signaling pathways. The full-length Probable 3',5'-cyclic-AMP phosphodiesterase pde-4 enzyme hydrolyzes the essential second messenger 3',5'-cyclic AMP (cAMP), a key regulator of numerous physiological processes. In Caenorhabditis elegans, this enzyme plays a critical role in neuronal development by antagonizing dorsal D motor neuron respecification through reduction of cAMP levels, highlighting its importance in cellular differentiation and signaling pathways.