Recombinant PDE4D protein (His tag)

Catalog Number	544868
Synonyms	DPDE3; PDE43; cAMP-specific phosphodiesterase 4D
Species	Human
Expression System	E. coli
Accession	Q08499
Molecular Weight	Predictes a molecular mass of 40.21 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	380-714
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 380-714 aa (Q08499) 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 Human 3',5'-cyclic-AMP phosphodiesterase 4D (PDE4D) Fragment (residues 380-714) – a stable and soluble protein unit ideal for structural studies and biochemical assays investigating cAMP hydrolysis and signaling pathways. 3',5'-cyclic-AMP phosphodiesterase 4D (PDE4D), encoded by the PDE4D gene, hydrolyzes the second messenger cAMP, a critical regulator of numerous physiological processes. This enzyme is localized to the apical cell membrane, cytoplasm, cytoskeleton, and centrosome, and is involved in modulating cAMP levels in various cellular compartments. The provided fragment (residues 380-714) was selected for its stability and solubility, enabling detailed analysis of PDE4D function in cAMP-mediated signaling without the full-length protein's complexity.