Recombinant CANB2 protein (His tag)

Catalog Number	541034
Synonyms	Calcineurin B-like protein; CBLP; Calcineurin BII; CNBII; PPP3R1-like; Protein phosphatase 2B regulatory subunit 2; Protein phosphatase 3 regulatory subunit B beta isoform
Species	Human
Expression System	E. coli
Accession	Q96LZ3
Molecular Weight	Predictes a molecular mass of 21.06 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	2-170
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 2-170 aa (Q96LZ3) 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 Calcineurin subunit B type 2 (PPP3R2) Fragment (aa 2-170) – a high-purity protein encompassing all four EF-hand domains, engineered for studying calcium-dependent regulatory functions in phosphatase signaling pathways. Calcineurin subunit B type 2 (PPP3R2) serves as the regulatory subunit of calcineurin, a calcium- and calmodulin-stimulated protein phosphatase essential for calcium-mediated signal transduction. This subunit confers calcium sensitivity to the phosphatase complex, enabling its activation in response to intracellular calcium fluxes. In human cells, the protein localizes to mitochondria, with mitochondrial targeting regulated by SPATA33-dependent mechanisms. The recombinant fragment (aa 2-170) retains the complete EF-hand domain architecture (EF-hands 1-4), making it an invaluable tool for investigating calcium-binding properties, regulatory interactions, and mitochondrial signaling roles in cellular processes.