Recombinant 2A5A protein (His tag)

Catalog Number	538082
Synonyms	PP2A B subunit isoform B'-alpha; PP2A B subunit isoform B56-alpha; PP2A B subunit isoform PR61-alpha; PR61alpha; PP2A B subunit isoform R5-alpha
Species	Human
Expression System	E. coli
Accession	Q15172
Molecular Weight	Predictes a molecular mass of 52.59 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 56 kDa band.

Product Information

Sequence Region	52-486
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 52-486 aa (Q15172) 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 Serine/threonine-protein phosphatase 2A 56 kDa regulatory subunit alpha isoform (PP2A B56-alpha) fragment (residues 52-486) is a high-purity, stable protein designed for structural and biochemical studies. This soluble fragment retains key functional properties, enabling researchers to investigate PP2A complex regulation, substrate selectivity, and cellular localization mechanisms in a reliable in vitro system. The full-length Serine/threonine-protein phosphatase 2A regulatory subunit (PPP2R5A) serves as a critical modulator of the PP2A holoenzyme, influencing substrate specificity, catalytic activity, and subcellular targeting. This protein dynamically localizes to both the cytoplasm and nucleus, with specific accumulation at centromeres during mitosis from prophase to metaphase, where it contributes to chromosomal segregation processes. The B56-alpha regulatory subunit plays an essential role in directing PP2A's phosphatase activity to particular cellular compartments and substrates, making it fundamental for signal transduction and cell cycle regulation studies.