Recombinant PP4R2 protein (His tag)

Catalog Number	546099
Species	Human
Expression System	E. coli
Accession	Q9NY27
Molecular Weight	Predictes a molecular mass of 19.50 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band.

Product Information

Sequence Region	1-154
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 1-154 aa (Q9NY27) 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 4 regulatory subunit 2 (PPP4R2) fragment (amino acids 1-154) is a high-quality protein designed for structural and biochemical studies. This fragment represents a stable, soluble unit ideal for investigating the regulatory mechanisms of the PP4 complex in DNA repair and cellular signaling pathways. The full-length Serine/threonine-protein phosphatase 4 regulatory subunit 2 (PPP4R2) serves as a regulatory component of the serine/threonine-protein phosphatase 4 (PP4) complex, playing critical roles in centrosomal microtubule organization and spliceosomal snRNP maturation. It is essential for DNA damage response, specifically dephosphorylating gamma-H2AX during DNA replication and facilitating RPA2 dephosphorylation to recruit RAD51 for efficient double-strand break repair. Located primarily in the cytoplasm, cytoskeleton, and centrosome, PPP4R2 relocalizes to nuclear foci upon ionizing radiation, underscoring its dynamic involvement in genomic stability and cellular stress responses.