# Recombinant PPR18 protein (His tag)

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| **Catalog Number** | 547508 |
| **Synonyms** | Protein phosphatase 1 F-actin cytoskeleton-targeting subunit; Protein phosphatase 1 regulatory subunit 18 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q6NYC8 |
| **Molecular Weight** | Predictes a molecular mass of 11.25 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band. |

## Product Information

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| **Sequence Region** | 474-562 |
| **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 474-562 aa (Q6NYC8) were fused with 6His tag. |

## Storage & Handling

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| **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.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

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| **Description** | Recombinant Phostensin (PPP1R18) Fragment (474-562) is a high-quality, stable protein fragment derived from the human protein phosphatase 1 regulatory subunit 18. This 89-amino acid fragment is designed for structural and biochemical studies, offering researchers a soluble and functional unit to investigate the role of Phostensin in targeting protein phosphatase 1 to the F-actin cytoskeleton.<br>Phostensin, encoded by the PPP1R18 gene in Homo sapiens, functions as a regulatory subunit that targets protein phosphatase 1 (PP1) to the F-actin cytoskeleton. This targeting is critical for modulating cytoskeletal dynamics and cellular processes, as evidenced by studies on its isoforms (Isoform 1 and Isoform 4), which localize to the cytoplasm and cytoskeleton. The full-length protein plays a key role in bridging PP1 activity with actin reorganization, influencing cell morphology and signaling pathways. The provided fragment (474-562) represents a computationally selected region optimized for experimental applications, enabling focused analysis of Phostensin's functional properties without domain-specific constraints. |