# Recombinant APT protein (His tag)

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| **Catalog Number** | 534778 |
| **Synonyms** | APRT |
| **Species** | Caenorhabditis elegans |
| **Expression System** | E. coli |
| **Accession** | P91455 |
| **Gene ID** | 172232 |
| **Molecular Weight** | Predictes a molecular mass of 21.86 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band. |

## Product Information

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| **Sequence Region** | 1-185 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >87%, 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 1-185 aa (P91455) 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 Adenine phosphoribosyltransferase (APRT) from Caenorhabditis elegans, a key enzyme in the purine salvage pathway, is now available as a stable and soluble fragment (residues 1-185) optimized for structural and biochemical studies.<br>Adenine phosphoribosyltransferase (APRT) (EC 2.4.2.7) catalyzes a salvage reaction to form AMP, providing an energetically efficient alternative to de novo purine synthesis. This enzyme is localized in the cytoplasm, where it plays a critical role in nucleotide metabolism by recycling adenine into adenosine monophosphate. The recombinant fragment (residues 1-185) represents a structurally stable and soluble unit, enabling detailed investigation of APRT's catalytic mechanism and functional properties. |