# Recombinant CAPAM protein (His tag)

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| **Catalog Number** | 548243 |
| **Synonyms** | 2'-O-methyladenosine-N(6)-; Cap-specific adenosine methyltransferase; CAPAM; hCAPAM; Phosphorylated CTD-interacting factor 1; hPCIF1; Protein phosphatase 1 regulatory subunit 121 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q9H4Z3 |
| **Molecular Weight** | Predictes a molecular mass of 60.07 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 62 kDa band. |

## Product Information

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| **Sequence Region** | 170-669 |
| **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 170-669 aa (Q9H4Z3) 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 PCIF1 protein fragment (residues 170-669) from Homo sapiens, a stable and soluble unit of the mRNA cap-specific adenosine methyltransferase. This fragment is ideal for structural studies and biochemical assays investigating m6A(m) cap methylation mechanisms.<br>PCIF1 (Phosphorylated CTD-interacting factor 1) is a nuclear cap-specific adenosine methyltransferase that catalyzes the formation of N(6),2'-O-dimethyladenosine (m6A(m)) at the second transcribed position of capped mRNAs. It is recruited to the early elongation complex of RNA polymerase II via interaction with POLR2A, enabling co-transcriptional methylation. This modification plays a critical role in mRNA regulation, with implications for gene expression control and cellular function. |