# Recombinant CCAR1 protein (His tag)

| | |
|---|---|
| **Catalog Number** | 543095 |
| **Synonyms** | Cell cycle and apoptosis regulatory protein 1; CARP-1; Death inducer with SAP domain |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q8IX12 |
| **Molecular Weight** | Predictes a molecular mass of 54.67 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 65 kDa band. |

## Product Information

| | |
|---|---|
| **Sequence Region** | 361-812 |
| **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 361-812 aa (Q8IX12) 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.<br>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 CCAR1 (CARP-1) Fragment (361-812) is a high-purity protein designed for studying the SAP domain's role in transcriptional regulation, apoptosis signaling, and cell cycle control. This fragment provides a targeted tool for investigating domain-specific interactions and functions in cellular processes.<br>The full-length Cell division cycle and apoptosis regulator protein 1 (CCAR1/CARP-1) is a multifunctional protein involved in transcriptional regulation by associating with Mediator and p160 coactivator complexes, enhancing nuclear receptor and p53-mediated gene expression. It plays a critical role in apoptosis induction through 14-3-3 protein sequestration and modulation of cell cycle genes like MYC and CDKN1A. Additionally, CCAR1 acts as a coactivator or corepressor for androgen receptor signaling, contributing to chromatin looping and prostate cancer tumorigenesis. It is primarily localized in the perinuclear region of the cytoplasm. The recombinant fragment (361-812) encompasses the SAP domain, enabling focused research on its specific contributions to these regulatory mechanisms. |