# Recombinant DOC11 protein (His tag)

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| **Catalog Number** | 540458 |
| **Synonyms** | Activated Cdc42-associated guanine nucleotide exchange factor; ACG; Zizimin-2 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q5JSL3 |
| **Molecular Weight** | Predictes a molecular mass of 29.00 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band. |

## Product Information

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| **Sequence Region** | 41-273 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >88%, 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 41-273 aa (Q5JSL3) 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** | Introducing the recombinant DOCK11 protein fragment (amino acids 41-273), a high-purity tool designed for studying the PH domain of Dedicator of cytokinesis protein 11. This fragment enables targeted investigation into CDC42 activation mechanisms, supporting research on immune cell development and cytoskeletal dynamics.<br>Dedicator of cytokinesis protein 11 (DOCK11) is a guanine nucleotide-exchange factor that specifically activates CDC42 by facilitating the exchange of GDP for GTP, playing crucial roles in filopodia formation and B-cell development. Research demonstrates its importance in marginal zone B-cell maturation and bone marrow B-cell development, with implications for immune system function and cellular morphology. The full-length protein's activity as a CDC42-GEF makes it valuable for studying small GTPase signaling pathways in health and disease. |