# Recombinant DOCK6 protein (His tag)

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| **Catalog Number** | 545687 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q96HP0 |
| **Molecular Weight** | Predictes a molecular mass of 46.60 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 47 kDa band. |

## Product Information

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| **Sequence Region** | 445-843 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >90%, 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 445-843 aa (Q96HP0) 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 Human DOCK6 (Dedicator of cytokinesis protein 6) Fragment (aa 445-843): A high-purity protein fragment encompassing the C2 DOCK-type domain, designed for studying CDC42 and RAC1 guanine nucleotide exchange activity and its role in cellular processes like neurite outgrowth.<br>DOCK6 is a guanine nucleotide exchange factor (GEF) that activates the small GTPases CDC42 and RAC1, playing a key role in regulating cellular functions such as neurite outgrowth. The protein is primarily localized in the cytoplasm, particularly in the perinuclear region and near the cell surface, where it facilitates signaling events critical for cytoskeletal organization and neuronal development. This fragment (aa 445-843) includes the C2 DOCK-type domain, enabling focused research on the specific mechanisms of GEF activity and domain function. |