# Recombinant DCDC1 protein (His tag)

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| **Catalog Number** | 541690 |
| **Synonyms** | Doublecortin domain-containing 5 protein |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | M0R2J8 |
| **Molecular Weight** | Predictes a molecular mass of 26.76 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 27 kDa band. |

## Product Information

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| **Sequence Region** | 846-1066 |
| **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 846-1066 aa (M0R2J8) 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 Doublecortin domain-containing protein 1 (DCDC1) fragment (residues 846-1066) encompassing the Doublecortin 2 domain. This high-purity protein serves as an essential tool for investigating microtubule-associated vesicle transport mechanisms during cytokinesis.<br>Doublecortin domain-containing protein 1 is a microtubule-binding protein critical for dynein-dependent transport of RAB8A-positive vesicles to the midbody during cytokinesis. The full-length protein localizes to key cellular structures including the midbody, midbody ring, and cytoskeletal spindle, where it associates specifically with stabilized microtubules during metaphase and cytokinesis. This strategic localization enables its fundamental role in regulating vesicle trafficking during cell division processes. |