# Recombinant MIC19 protein (His tag)

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| **Catalog Number** | 546089 |
| **Synonyms** | Coiled-coil-helix-coiled-coil-helix domain-containing protein 3 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q9NX63 |
| **Molecular Weight** | Predictes a molecular mass of 27.68 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band. |

## Product Information

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| **Sequence Region** | 2-227 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >89%, 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 2-227 aa (Q9NX63) 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 MICOS complex subunit MIC19 (CHCHD3) fragment (aa 2-227) is a high-purity protein designed for studying mitochondrial inner membrane architecture and cristae morphology. This fragment fully encompasses the CHCH domain, making it an ideal tool for investigating domain-specific functions in mitochondrial structure and transcriptional regulation.<br>MICOS complex subunit MIC19 (encoded by CHCHD3) is a crucial component of the mitochondrial inner membrane MICOS complex, which maintains crista junctions, inner membrane architecture, and contact sites with the outer membrane. It plays a vital role in stabilizing the MICOS complex and preserving mitochondrial cristae morphology. Additionally, MIC19 functions as a transcription factor that binds to the BAG1 promoter and represses its transcription. The protein localizes primarily to the mitochondrial inner membrane (intermembrane side) but has also been detected in the cytoplasm and nucleus, reflecting its dual roles in mitochondrial structure and nuclear gene regulation. |