# Recombinant CC159 protein (His tag)

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| **Catalog Number** | 550600 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | P0C7I6 |
| **Molecular Weight** | Predictes a molecular mass of 29.79 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band. |

## Product Information

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| **Sequence Region** | 1-244 |
| **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 1-244 aa (P0C7I6) 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 Coiled-coil domain-containing protein 159 (CCDC159) fragment (amino acids 1-244) is a high-purity, stable protein designed for structural and functional studies. This fragment, derived from the full-length protein essential for spermatid development, offers researchers a soluble and reliable tool to investigate mechanisms of sperm formation and flagellar attachment.<br>Coiled-coil domain-containing protein 159 (CCDC159), encoded by the gene CCDC159 in Homo sapiens, plays a critical role during spermatid development. It is involved in the centrosome reduction process of spermatids and is required for the formation of the connecting piece, also known as the head-tail coupling apparatus (HTCA). Additionally, CCDC159 ensures the correct and tight attachment of the flagellum to the nuclear envelope, which is vital for proper sperm function. The protein localizes specifically to the spermatid HTCA during spermatogenesis, highlighting its importance in male reproductive biology and potential implications in fertility research. |