# Recombinant DMRT3 protein (His tag)

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| **Catalog Number** | 546031 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q9NQL9 |
| **Molecular Weight** | Predictes a molecular mass of 11.73 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band. |

## Product Information

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| **Sequence Region** | 1-88 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >85%, 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 1-88 aa (Q9NQL9) 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** | This product is a recombinant fragment of the Doublesex- and mab-3-related transcription factor 3 (DMRT3), corresponding to amino acids 1-88. It is a stable, soluble protein unit designed for structural and biochemical studies, offering researchers a reliable tool to investigate the molecular mechanisms underlying spinal cord development and locomotor control.<br>The full-length DMRT3 protein is a probable transcription factor that plays a critical role in configuring spinal circuits to control stride in vertebrates. It is involved in neuronal specification within specific spinal cord subdivisions and contributes to the development of a coordinated locomotor network that regulates limb movements. Based on similarity to related proteins, it may also function in transcriptional regulation during sexual development. DMRT3 is localized to the nucleus, consistent with its role as a transcription factor. |