# Recombinant ANO4 protein (His tag)

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| **Catalog Number** | 547385 |
| **Synonyms** | Transmembrane protein 16D |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q32M45 |
| **Molecular Weight** | Predictes a molecular mass of 15.74 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band. |

## Product Information

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| **Sequence Region** | 235-352 |
| **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 235-352 aa (Q32M45) 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 Anoctamin-4 (Transmembrane protein 16D) Fragment (residues 235-352) is a high-quality, soluble protein product designed for structural and functional studies. This 118-amino acid fragment, derived from the human ANO4 gene, represents a stable and biochemically accessible region ideal for investigating calcium-dependent phospholipid scramblase activity and membrane protein dynamics. Anoctamin-4 (ANO4) is a multi-pass transmembrane protein located in the cell membrane and plays a critical role in calcium-dependent phospholipid scrambling. It facilitates the transbilayer movement of phosphatidylserine, phosphatidylcholine, and galactosylceramide, contributing to essential cellular processes such as membrane remodeling and signaling. Unlike some anoctamin family members, ANO4 does not function as a calcium-activated chloride channel, highlighting its specialized role in lipid transport. The protein's intracellular localization and scramblase activity make it a significant target for research in membrane biology, cell signaling, and related physiological pathways. |