# Recombinant VAX1 protein (His tag)

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| **Catalog Number** | 545145 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q5SQQ9 |
| **Molecular Weight** | Predictes a molecular mass of 15.24 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band. |

## Product Information

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| **Sequence Region** | 72-186 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >86%, 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 72-186 aa (Q5SQQ9) 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 VAX1 (Ventral anterior homeobox 1) fragment (aa 72-186) is a high-quality protein designed for structural and biochemical studies. This 115-amino acid fragment was computationally selected for optimal stability and solubility, enabling reliable investigation of this key transcription factor involved in forebrain development and axon guidance.<br>Ventral anterior homeobox 1 (VAX1) is a human transcription factor that plays critical roles in dorsoventral specification of the forebrain during development. It is essential for proper axon guidance and major tract formation in the developing forebrain, and contributes to the differentiation of neuroretina, pigmented epithelium, and optic stalk. The protein localizes to the nucleus, consistent with its function as a transcription factor. This recombinant fragment provides researchers with a stable, soluble protein unit ideal for studying VAX1's structural properties and molecular interactions. |