# Recombinant ITAV protein (His tag)

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| **Catalog Number** | 537440 |
| **Synonyms** | Vitronectin receptor; Vitronectin receptor subunit alpha; CD antigen CD51 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | P06756 |
| **Molecular Weight** | Predictes a molecular mass of 12.12 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band. |

## Product Information

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| **Sequence Region** | 899-992 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >90%, 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 899-992 aa (P06756) 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 Integrin alpha-V Fragment (residues 899-992) is a high-purity protein product designed for structural and biochemical research. This 94-amino acid fragment represents a stable, soluble region of the vitronectin receptor (CD51), carefully selected through computational analysis to maintain structural integrity while enabling experimental applications that require well-behaved protein samples. Integrin alpha-V (ITGAV) is a crucial cell adhesion receptor that forms heterodimers with various beta subunits to recognize the R-G-D motif in numerous extracellular matrix proteins including vitronectin, fibronectin, fibrinogen, and laminin. The full-length protein localizes to the cell membrane and focal adhesions, playing essential roles in cell-matrix interactions, angiogenesis, and cellular signaling. ITGAV functions as a receptor for multiple growth factors including FGF1, FGF2, IGF1, IGF2, and NRG1, and participates in TGF-beta-1 activation through interactions with regulatory latency-associated peptides. Its diverse ligand binding capabilities and involvement in multiple signaling pathways make it a protein of significant interest in cell biology, cancer research, and developmental studies. |