Recombinant EN113 protein (His tag)

Catalog Number	548808
Synonyms	EnvK5 protein; Envelope polyprotein; HERV-K113 envelope protein; HERV-K_19p13.11 provirus ancestral Env polyprotein; SU; TM
Species	Human
Expression System	E. coli
Accession	Q902F9
Molecular Weight	Predictes a molecular mass of 42.05 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	90-444
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 90-444 aa (Q902F9) were fused with 6His tag.

Storage & Handling

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. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	This recombinant protein product features a stable and soluble fragment (residues 90-444) of the Endogenous retrovirus group K member 113 Envelope polyprotein (EnvK5), derived from human endogenous retrovirus HERV-K113. It is designed for structural and biochemical studies, offering a functional unit ideal for investigating retroviral envelope protein mechanisms in a controlled experimental setting. The full-length Endogenous retrovirus group K member 113 Envelope polyprotein originates from Homo sapiens and is part of endogenous retroviral elements that have evolved over time. It functions in receptor recognition via its Surface protein (SU) subunit and membrane anchoring through the Transmembrane protein (TM), though it has lost its original fusogenic activity. The protein localizes to the cell membrane, with SU peripherally associated and TM integrated as a single-pass type I membrane protein, and is typically found in virion structures. This recombinant fragment provides a key region for studying envelope protein interactions and evolutionary adaptations without fusogenic complications.