Recombinant EFC1 protein (His tag)

Catalog Number	547117
Synonyms	Envelope polyprotein; Fc1env; HERV-F(c)1_Xq21.33 provirus ancestral Env polyprotein; HERV-Fc1env; SU; TM
Species	Human
Expression System	E. coli
Accession	P60507
Molecular Weight	Predictes a molecular mass of 19.24 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	32-180
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 32-180 aa (P60507) 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	Recombinant Endogenous Retrovirus Group FC1 Envelope Polyprotein (Fc1env) Fragment (32-180) is a high-purity, stable protein fragment designed for structural and biochemical research. This 149-amino acid fragment represents a soluble and stable unit of the endogenous retroviral envelope protein, making it ideal for investigating receptor recognition mechanisms and protein interactions in a controlled experimental setting. The full-length Endogenous Retrovirus Group FC1 Envelope Polyprotein (ERVFC1) is derived from human endogenous retroviral elements and plays a role in receptor recognition and membrane fusion processes during early viral infection. While the endogenous form has lost its original fusogenic properties, its surface (SU) subunit mediates receptor binding, and the transmembrane (TM) subunit anchors the protein to the membrane. The protein is localized to the virion and cell membrane, where it functions as a single-pass membrane protein. This recombinant fragment provides a valuable tool for studying the structural features and functional domains of endogenous retroviral envelope proteins without the complexities of membrane association.