Recombinant ENH1 protein (His tag)

Catalog Number	539014
Synonyms	Env protein HERV-H/p62; Env protein HERV-H19; Env protein HERV-Hcl.3; Envelope polyprotein; HERV-H/env62; SU; TM
Species	Human
Expression System	E. coli
Accession	Q9N2K0
Molecular Weight	Predictes a molecular mass of 33.46 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	75-362
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 75-362 aa (Q9N2K0) 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 HERV-H_2q24.3 Env Polyprotein Fragment (residues 75-362) is a highly stable and soluble protein fragment derived from the human endogenous retroviral envelope polyprotein. This 288-amino acid fragment is ideal for structural studies, biochemical assays, and functional investigations into retroviral envelope protein mechanisms. The full-length HERV-H_2q24.3 provirus ancestral Env polyprotein (UniProt ID: Q9N2K0) is a human endogenous retroviral envelope protein that mediates receptor recognition and membrane fusion during viral infection. While this endogenous protein has lost its original fusogenic capabilities through evolution, it retains significant immunosuppressive properties in vivo. The protein is cleaved into Surface (SU) and Transmembrane (TM) subunits, with SU responsible for receptor recognition and TM anchoring the envelope complex to the viral membrane through transmembrane domains. The full-length protein localizes to virions, with the TM subunit specifically located at the cell membrane as a single-pass membrane protein. This recombinant fragment represents a computationally selected stable region that maintains key structural features while offering enhanced solubility for experimental applications.