Recombinant ERB1 protein (His tag)

Catalog Number	549467
Synonyms	Endogenous retrovirus group PABLB member 1; Envelope polyprotein; HERV-R(b) Env protein; HERV-R(b)_3p24.3 provirus ancestral Env polyprotein; SU; TM
Species	Human
Expression System	E. coli
Accession	P60509
Molecular Weight	Predictes a molecular mass of 29.21 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	63-301
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 63-301 aa (P60509) 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 PABLB Member 1 Envelope Polyprotein Fragment (residues 63-301) is a highly purified protein preparation ideal for studying retroviral envelope protein biology. This 239-amino acid fragment was computationally designed to provide optimal stability and solubility while maintaining structural integrity, making it an excellent tool for structural analysis, biochemical characterization, and functional studies of endogenous retroviral elements. The full-length ERVPABLB-1 envelope polyprotein is an endogenous retroviral envelope protein that originally functioned in receptor recognition and membrane fusion during retroviral infection. Through evolutionary processes, this human-derived envelope protein has lost its original fusogenic capabilities while maintaining its membrane localization as a single-pass membrane protein. Originally localized in viral particles, endogenous retroviral envelope proteins like ERVPABLB-1 represent important evolutionary remnants that provide insights into host-virus co-evolution and may have adapted novel cellular functions over time. This protein offers researchers a valuable model for studying the evolutionary trajectory of retroviral elements integrated into the human genome.