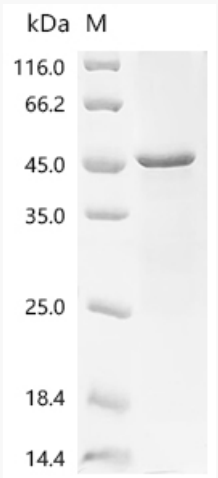
for research use only

Certificate of Analysis

Product Name	Recombinant Human Syncytin-1(ERVW-1),partial	
Catalog Number	**AAA18779**	
Expression host	*Yeast*	
Tag Info	N-terminal 6xHis-tagged	
Buffer	Lyophilized from a 0.2 μm sterile filtered PBS, 6% Trehalose, pH 7.4. The volume before lyophilization is 98μl/vial.	
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20℃/-80℃. Our default final concentration of glycerol is 50%. Customers could use it as reference.	
Batch Number	DD06168k1g0	
Nature	Human ERVW-1-(AA 21-443)-Q9UQF0-Partial Protein	
Purification	Affinity purified using IMAC	
Recommended Storage	Short term	2 to 8 ℃, one week after reconstitution
	Long term	-20 to -80 ℃, twelve months from the date of receipt
Form	Lyophilized powder	
Date of detection	2024.12.10	

Test Items	**Specifications**		**Results**
Purity	≥90%,by SDS-PAGE quantitative densitometry by Coomassie Blue Staining.		90%
Molecular Weight	Predicted band size: 53.1 kDa		Observed band size: 49 kDa

Electrophoretic parameters	(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.	
Aseptic Processing	Lyophilized protein has been sterile filtered prior to lyophilization. However, the lyophilization process could potentially compromise sterility and please follow the instruction below if customers need a sterile filtered protein. Please sterile filter reconstituted lyophilized proteins with a 0.22μm filter in a clean bench (or other sterile environment) after reconstitution. Customers could use it as reference.	
Endotoxin Level	<1.0 EU per 1μg of the protein by the LAL method.	pass
Activity	Not tested	
Conclusion	pass	

Datasheet

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Tag Info	N-terminal 6xHis-tagged
Buffer	Lyophilized from a 0.2 μm sterile filtered PBS, 6% Trehalose, pH 7.4. The volume before lyophilization is 98μl/vial.
Storage	Store at -20℃, for extended storage, conserve at -20℃ or -80℃.
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4℃ for up to one week.
Relevance	This endogenous retroviral envelope protein has retained its original fusogenic properties and participates in trophoblast fusion and the formation of a syncytium during placenta morphogenesis. May induce fusion through binding of SLC1A4 and SLC1A5.; Endogenous envelope proteins may have kept, lost or modified their original function during evolution. Retroviral envelope proteins mediate receptor recognition and membrane fusion during early infection. The surface protein (SU) mediates receptor recognition, while the transmembrane protein (TM) acts as a class I viral fusion protein. The protein may have at least 3 conformational states: pre-fusion native state, pre-hairpin intermediate state, and post-fusion hairpin state. During viral and target cell membrane fusion, the coiled coil regions (heptad repeats) assume a trimer-of-hairpins structure, positioning the fusion peptide in close proximity to the C-terminal region of the ectodomain. The formation of this structure appears to drive apposition and subsequent fusion of membranes.
AA sequence	APPPCRCMTSSSPYQEFLWRMQRPGNIDAPSYRSLSKGTPTFTAHTHMPRNCYHSATLCMHANTHYWTGK MINPSCPGGLGVTVCWTYFTQTGMSDGGGVQDQAREKHVKEVISQLTRVHGTSSPYKGLDLSKLHETLRTHT RLVSLFNTTLTGLHEVSAQNPTNCWICLPLNFRPYVSIPVPEQWNNFSTEINTTSVLVGPLVSNLEITHTSNLTC VKFSNTTYTTNSQCIRWVTPPTQIVCLPSGIFFVCGTSAYRCLNGSSESMCFLSFLVPPMTIYTEQDLYSYVISKP RNKRVPILPFVIGAGVLGALGTGIGGITTSTQFYYKLSQELNGDMERVADSLVTLQDQLNSLAAVVLQNRRAL DLLTAERGGTCLFLGEECCYYVNQSGIVTEKVKEIRDRIQRRAEELRNTGPWGLLSQ