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ERVFRD-1 Rabbit pAb

Catalog # AP100281

Product Information

Application	WB, IP
Primary Accession	P60508
Other Accession	P60508
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	59523
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human HERV-FRD
Epitope Specificity	331-430/538
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the gamma type-C retroviral envelope protein family. HERV class-I FRD env subfamily.
SUBUNIT	The surface (SU) and transmembrane (TM) proteins form a heterodimer. SU and TM are attached by noncovalent interactions or by a labile interchain disulfide bond (By similarity).
Post-translational modifications	Specific enzymatic cleavages in vivo yield the mature SU and TM proteins (By similarity).The CXXC motif is highly conserved across a broad range of retroviral envelope proteins. It is thought to participate in the formation of a labile disulfide bond possibly with the CX6CC motif present in the transmembrane protein. Isomerization of the intersubunit disulfide bond to an SU intrachain disulfide bond is thought to occur upon receptor recognition in order to allow membrane fusion (By similarity).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Retroviral envelope proteins mediate receptor recognition and membrane fusion during early infection. Endogenous envelope proteins may have kept, lost or modified their original function during evolution. This endogenous envelope protein has retained its original fusogenic properties. Can make pseudotypes with MLV, HIV-1 or SIV-1 virions and confer infectivity.SU mediates receptor recognition (By similarity).TM anchors the envelope heterodimer to the viral membrane through one transmembrane domain. The other hydrophobic domain, called fusion peptide, mediates fusion of the viral membrane with the target cell membrane (By similarity).

Additional Information

Gene ID	405754
Other Names	ERVFRDE1; GLLL6191; HERV-FRD; HERV-W/FRD; UNQ6191; envFRD; SYCY2_HUMAN; ERVFRD-1; Endogenous retrovirus group FRD member 1;

	Envelope polyprotein; HERV-FRD_6p24.1 provirus ancestral Env polyprotein; endogenous retrovirus group FRD member 1, envelope; endogenous retrovirus group FRD, member 1; syncytin 2
Dilution	WB=1:500-2000,IP=1:50-200
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	ERVFRD-1
Synonyms	ERVFRDE1
Function	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. The interaction with MFSD2A is apparently important for this process (PubMed:18988732).
Cellular Location	Virion. [Transmembrane protein]: Cell membrane; Single-pass membrane protein
Tissue Location	Expressed at higher level in placenta. Expressed at lower level in adrenal, bone marrow, brain, breast, colon, kidney, lung, ovary, peripheral blood lymphocytes, prostate, skin, spleen, testis, thymus, thyroid, trachea.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.