10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HERV-FRD Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13018A

Product Information

Application	WB, E
Primary Accession	P60508
Other Accession	P61556, NP_997465.1
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32774
Calculated MW	59523
Antigen Region	79-107

Additional Information

Gene ID	405754
Other Names	Syncytin-2, Endogenous retrovirus group FRD member 1, Envelope polyprotein, HERV-FRD, HERV-FRD_6p241 provirus ancestral Env polyprotein, Surface protein, SU, Transmembrane protein, TM, ERVFRD-1, ERVFRDE1
Target/Specificity	This HERV-FRD antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 79-107 amino acids from the N-terminal region of human HERV-FRD.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HERV-FRD Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

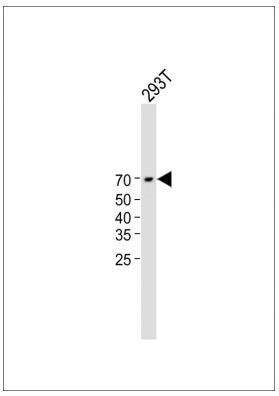
Background

Human endogenous retroviruses (HERVs) make up approximately 8% of the human genome. Although most HERVs are nonfunctional, the HERV-W (ERVWE1; MIM 604659) and HERV-FRD envelope (env) proteins can induce cell-cell fusion when expressed in cells possessing appropriate receptors (Blaise et al., 2003 [PubMed 14557543]).

References

Vargas, A., et al. J. Mol. Biol. 392(2):301-318(2009)
Chen, C.P., et al. Biol. Reprod. 79(5):815-823(2008)
Malassine, A., et al. Retrovirology 5, 6 (2008) :
Mangeney, M., et al. Proc. Natl. Acad. Sci. U.S.A. 104(51):20534-20539(2007)
Malassine, A., et al. Placenta 28 (2-3), 185-191 (2007) :

Images



All lanes : Anti-HERV-FRD Antibody (N-term) at 1:1000 dilution Lane 1: 293T whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 65kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Citations

- Demethylase FTO-mediated m6A modification of SIK1 modulates placental cytotrophoblast syncytialization in type 2 diabetes mellitus
- Tubulin detyrosination promotes human trophoblast syncytium formation.
- Involvement of nephrin in human placental trophoblast syncytialization.
- Effects of individually silenced N-glycosylation sites and non-synonymous single-nucleotide polymorphisms on the fusogenic function of human syncytin-2.
- PLAC1 is involved in human trophoblast syncytialization.
- Hyperglycemia in Pregnancy-Associated Oxidative Stress Augments Altered Placental Glucose Transporter 1 Trafficking via AMPKα/p38MAPK Signaling Cascade

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