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# HERV-FRD Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13018A

## Product Information

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| **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

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| **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

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| **Name** | ERVFRD-1 |
| **Synonyms** | ERVFRDE1 |

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| **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. |

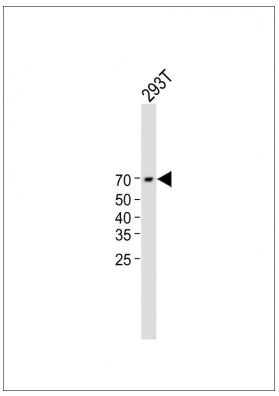
## Background

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.
- PLAC1 is involved in human trophoblast syncytialization.
- Effects of individually silenced N-glycosylation sites and non-synonymous single-nucleotide polymorphisms on the fusogenic function of human syncytin-2.
- Involvement of nephrin in human placental trophoblast syncytialization.