

# HERV (ERVWE1) Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2716C

#### **Product Information**

**Application** WB, IHC-P, E **Primary Accession** O9UQF0 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Calculated MW** 59866 **Antigen Region** 400-429

#### **Additional Information**

**Gene ID** 30816

Other Names Syncytin-1, Endogenous retrovirus group W member 1, Env-W, Envelope

polyprotein gPr73, Enverin, HERV-7q Envelope protein, HERV-W envelope protein, HERV-W\_7q212 provirus ancestral Env polyprotein, Syncytin, Surface protein, SU, gp50, Transmembrane protein, TM, gp24, ERVW-1, ERVWE1

Target/Specificity This HERV (ERVWE1) antibody is generated from rabbits immunized with a

KLH conjugated synthetic peptide between 400-429 amino acids from the

Central region of human HERV (ERVWE1).

**Dilution** WB~~1:1000 IHC-P~~1:100 E~~Use at an assay dependent concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

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 (ERVWE1) Antibody (Center) is for research use only and not for use in

diagnostic or therapeutic procedures.

#### **Protein Information**

Name ERVW-1

Synonyms ERVWE1

**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. May induce fusion through binding of SLC1A4 and SLC1A5 (PubMed: 10708449, PubMed: 12050356, PubMed: 23492904).

**Cellular Location** 

[Surface protein]: Cell membrane; Peripheral membrane protein. Note=The surface protein is not anchored to the membrane, but localizes to the extracellular surface through its binding to TM. [Syncytin-1]: Virion.

**Tissue Location** 

Expressed at higher level in placental syncytiotrophoblast. Expressed at intermediate level in testis. Seems also to be found at low level in adrenal tissue, bone marrow, breast, colon, kidney, ovary, prostate, skin, spleen, thymus, thyroid, brain and trachea. Both mRNA and protein levels are significantly increased in the brain of individuals with multiple sclerosis, particularly in astrocytes and microglia.

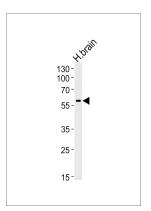
## **Background**

Many different human endogenous retrovirus (HERV) families are expressed in normal placental tissue at high levels, suggesting that HERVs are functionally important in reproduction. The protein, also known as syncytin, is expressed in the placental syncytiotrophoblast and is involved in fusion of the cytotrophoblast cells to form the syncytial layer of the placenta. This protein has the characteristics of a typical retroviral envelope protein, including a furin cleavage site that separates the surface (SU) and transmembrane (TM) proteins which form a heterodimer.

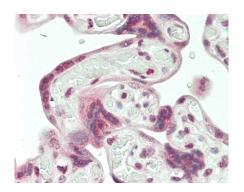
### References

Oluwole, S.O., Amyotroph Lateral Scler 8 (2), 67-72 (2007) Gong, R., Cell. Physiol. Biochem. 20 (5), 517-526 (2007) Antony, J.M., AIDS Res. Hum. Retroviruses 22 (12), 1253-1259 (2006)

## **Images**



Western blot analysis of lysate from human brain tissue lysate, using Syncytin(ERVWE1) Antibody(Cat. #AP2716c). AP2716c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.



Formalin-fixed and paraffin-embedded H.placenta tissue reacted with HERV (ERVWE1) Antibody (Center) (Cat#AP2716c).

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