

Anti-PERV [A5] Standard Size Ab02000-10.159

This chimeric human antibody was made using the variable domain sequences of the original VHH format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1-Fc fusion

Clone Number: A5

Alternative Name(s) of Target: Porcine Endogenous Retrovirus; gag protein; p15 matrix protein

UniProt Accession Number of Target Protein:

Published Application(s): WB

Published Species Reactivity: Porcine Endogenous Retrovirus

Immunogen: This variable heavy chain fragment was prepared by immunization of a young adult male Llama glama with a purified 60-kDa PERV-B gag protein. The gag protein was prepared by amplifying PERV-B gag cDNA from PK15 cell RNA using a forward and reverse primer and later on cloning it into the pET-30a expression vector.

Specificity: This antibody recognizes and binds the gag polyprotein and specifically recognizes the amino acids between 47 and 113 of p15 matrix protein of the porcine endogenous retrovirus.

Application Notes: This variable single heavy chain antibody to 60kDa gag polyprotein and p15 matrix protein of the PERV and its binding was confirmed by Western blotting. The antibody has shown to reduce the (PERV-A/B) virus production when it is intracellularly expressed in PK cells. This antibody with its high affinity for p15 matrix protein of the PERV gag polyprotein, solubility in aqueous environments and intracellular expression shows potential to be used as an intrabody to block the production of PERV and prevent risk of infections or transmission of infectious diseases (xenozoonosis) when tissues and organs from genetically modified pigs are to be used in xenotransplantation (Dekker et al., 2003).

Antibody First Published in: Dekker et al. Intracellularly expressed single-domain antibody against p15 matrix protein prevents the production of porcine retroviruses. J Virol. (2003); 77(22):12132-9.

[PMID:14581550](#)

Note on publication: Describes the generation and intracellular expression of a llama single domain antibody against p15 matrix protein of PERV.

Product Form

Size: 100 µg Purified antibody.

Purification:

Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.