

Anti-nucleocapsid (N) protein [Nb1] Bulk Size Ab03028-10.159-BT

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: Nb1

Alternative Name(s) of Target: NC; N Protein; Nucleoprotein; Nucleocapsid protein;

UniProt Accession Number of Target Protein: Q07499

Published Application(s): ELISA

Published Species Reactivity: Porcine epidemic diarrhea virus

Immunogen: The antibody was generated by immunizing a Bactrian camel with recombinant PEDV N protein followed by antibody library construction and phage display-based selection.

Specificity: The antibody binds the N protein of PEDV, which is associated with viral replication, transcription and assembly.

Application Notes: The specificity of this antibody (VHH) was confirmed by ELISA analysis. Langmuir model and sensorgrams data were used for kinetic analysis of PEDV N protein and Nb1. The K_a value measured was $1.97 \times 10^5 \text{ M}^{-1} \text{ s}^{-1}$, indicating a fast association constant. The K_a/K_d value, the equilibrium dissociation constant between Nb1 and PEDV N protein, reached up to $0.96 \times 10^8 \text{ M}$ (Ma et al, 2019; pmid:31526383).

Antibody First Published in: Ma et al. A novel biotinylated nanobody-based blocking ELISA for the rapid and sensitive clinical detection of porcine epidemic diarrhea virus J Nanobiotechnology. 2019 Sep 16;17(1):96. [PMID:31526383](#)

Note on publication: The paper describes the generation and characterization of the antibody.

Product Form

Size: 500 µg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. 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.