

Anti-Cap protein [Nb15] Standard Size Ab03027-10.159

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: Nb15

Alternative Name(s) of Target: Capsid protein; Cap; ORF2; anti-PCV2-Nb15

UniProt Accession Number of Target Protein: O56129

Published Application(s): ELISA

Published Species Reactivity: Porcine circovirus type 2

Immunogen: The original antibody was generated by immunizing Bactrian camel (*Camelus bactrianus*) with recombinant PCV2-Cap protein, followed by antibody library construction and phage display-based selection.

Specificity: The antibody binds to PCV2 Cap protein. There was no cross-reaction when detecting positive sera against other porcine viruses. the M2 cytoplasmic domain interacts directly with mammalian host cell proteins (e.g., in the autophagy pathway) and plays an important role in regulating viral replication.

Application Notes: The ability of this antibody (VHH) to recognize PCV2 Cap protein was confirmed by indirect ELISA analysis. The antibody was used to develop a competitive ELISA for detecting PCV2 antibody levels in porcine serum samples (Mu et al, 2021; pmid:33526021).

Antibody First Published in: Mu et al. A nanobody-horseradish peroxidase fusion protein-based competitive ELISA for rapid detection of antibodies against porcine circovirus type 2 *J Nanobiotechnology*. 2021 Feb 1;19(1):34. [PMID:33526021](#)

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

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.