

## Anti-non-structural protein 4 [Nb43] Bulk Size Ab03514-1.159-BT

**Isotype and Format:** Mouse IgG1-Fc fusion

**Clone Number:** Nb43

**Alternative Name(s) of Target:** NSP4; Replicase polyprotein 1ab; ORF1ab polyprotein

**UniProt Accession Number of Target Protein:** Q9YN02

**Published Application(s):** in vitro, ELISA

**Published Species Reactivity:** Porcine reproductive and respiratory syndrome virus

**Immunogen:** An adult male Bactrian camel was immunized subcutaneously with the purified Nsp4-NHis recombinant protein. A camel VHH library was then constructed and panned against Nsp4.

**Specificity:** The antibody is specific for Nsp4.

**Application Notes:** The specificity of the original format of the antibody was confirmed by indirect ELISA analysis. MARC-145 cell lines expressing nanobodies were generated and infected with PRRSV strain SD16. At 24 h post-infection the antibody inhibited infectious virus release by about 99%. Further, the antibody protected MARC-145 cells from any virus-induced cytopathic effect and fully blocked PRRSV replication (Liu et al. 2016; PMID: 27010387).

**Antibody First Published in:** Liu et al. Intracellularly expressed nanobodies against non-structural protein 4 of porcine reproductive and respiratory syndrome virus inhibit virus replication *Biotechnol Lett.* 2016 Jul;38(7):1081-8. [PMID:27010387](#)

**Note on publication:** The original paper describes the generation and characterization of a set of antibodies by phage display method.

### 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.