

Anti-VLP of CPV-VP2 [scFv 96] Bulk Size Ab03609-201.4-BT

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This chimeric dog antibody was made using the variable domain sequences of the original Chicken scFv format for improved compatibility with existing reagents assays and techniques.

Isotype and Format: Dog IgG2 (IgG-B), Fc Silent™, Lambda

Clone Number: scFv 96

Alternative Name(s) of Target: Coat protein VP2

UniProt Accession Number of Target Protein: P61826

Published Application(s): neutralization, ELISA

Published Species Reactivity: canine parvovirus

Immunogen: This antibody was raised by first immunizing twelve-week old white Leghorn hens intramuscularly with CPV-VLP. A library was then constructed from these chickens and panned against CPV-VLP.

Specificity: This antibody is specific for the VP2 for the Canine Parvovirus. VP2 is a capsid protein that self-assembles to form an icosahedral capsid with a T=1 symmetry, about 22 nm in diameter, and consisting of 60 copies of two size variants of the capsid proteins, VP1 and VP2, which differ by the presence of an N-terminal extension in the minor protein VP1. The Canine Parvovirus is a disease mainly affecting dogs with a 91% mortality rate.

Application Notes: To analyse the sensitivity of the scFv version of this antibody an ELISA was performed on CPV-VP2. Furthermore, the ability of this antibody to prevent a CPV infection was determined, it showed a decrease of 30% over 72 hours (Ge et al, 2020; pmid:32883344).

Antibody First Published in: Ge et al. Canine Parvovirus is diagnosed and neutralized by chicken IgY-scFv generated against the virus capsid protein. Vet Res. 2020; 51: 110. [PMID:32883344](#)

Note on publication: Canine parvovirus (CPV) can cause acute and highly contagious bloody enteritis in dog. To obtain antibodies against CPV, hens were immunized with virus-like particles (VLP) of CPV-VP2. The IgY single chain fragment variables (scFv) were generated by T7 phage display system and expressed in E. coli system.

Product Form

Size: 1 mg 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.