

Anti-PLA2, Fraction 19 [TPL004_01_A11] Standard Size Ab01646-10.3

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

This full-length, reformatted human antibody was made using the variable domain sequences of the original Human scFv format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, [Fc Silent™](#), Kappa

Clone Number: TPL004_01_A11

Alternative Name(s) of Target: Phospholipase A2 'basic'; Phospholipase A2; svPLA2; Phosphatidylcholine 2-acylhydrolase; Phospholipase A2 isozyme III/IV; CM-III/CM-IV

UniProt Accession Number of Target Protein: P00605

Published Application(s): ELISA

Published Species Reactivity: Naja nigricollis

Immunogen: The antibody was raised using IONTAS phage display library, a naïve human scFv library consisting of $4.0 \cdot 10^{10}$ unique antibody fragments. Through phage display selection, scFv-presenting phages were allowed to bind the venom proteins, phages with unspecific binding were washed away, and the rest were eluted through enzymatic digestion. These were then amplified and used for the following round. In total three rounds of selections were completed leaving the best binders behind.

Specificity: TPL004_01_A11 antibody recognizes PLA2 (Phospholipase A2 'basic'), which is one of the major proteins in the venom of the black-necked spitting cobra (Naja nigricollis).

Application Notes: TPL004_01_A11 antibody has a very high affinity to the PLA2. It was demonstrated by normalized ELISA, which circumvents the limitation of a simple ELISA by removing the expression variable, normalizing the amount of scFv in each well. The antibody's high affinity was confirmed by its ability to bind the target protein in a venom fraction even at 1:32,000 dilution ($3.125 \cdot 10^{-2}$) µg/mL (Jürgensen et al., 2019 [poster]). It is recommended for the research on the antitoxin against Naja nigricollis snakebites.

Antibody First Published in: Jürgensen et al. Harnessing monoclonal antibodies for development of a specific treatment against Naja nigricollis envenoming. 10.13140/RG.2.2.24771.14884. [PMID:](#)

Note on publication: This poster describes the generation and characterization of the TPL004_01_A11 antibody among other antibodies directed against the venom toxins of Naja nigricollis.

Product Form

Size: 200 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.