

Anti-Norovirus P domain [Nano-4] Standard Size Ab01247-10.9

This chimeric human antibody was made using a variable domain sequence of the original VHH format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1-Fc fusion

Clone Number: Nano-4

Alternative Name(s) of Target:

UniProt Accession Number of Target Protein: Q83884

Published Application(s): crystallography, ITC, neutralisation assay, ELISA

Published Species Reactivity: Norovirus

Immunogen: An alpaca was injected with norovirus GII.10 virus-like particles (VLPs), and a phage display library constructed. Nano-4 was selected from this phage display library.

Specificity: Nano-32 is specific for GII.10 strain of Norovirus, but shows limited cross-reactivity with other GI and GII norovirus strains, binding GII.10, GII.17, GII.12, and GII.1 P domains.

Application Notes: The binding specificity of Nano-4 for the P domain of Norovirus strain GII.10 was confirmed using ELISA (Koromyslova et al, 2017). Nano-4 has stronger binding capabilities than Nano-27 or Nano-32; however, it also has limited cross-reactivity for other GI and GII norovirus strains. Nano-4 does not inhibit the binding of GII.10 to A-type saliva, B-type saliva, or pig gastric mucin as shown through neutralisation assays (Koromyslova et al, 2017). The crystal structure of Nano-4 in complex with the GII.17 P domain has been obtained (Koromyslova et al, 2017).

Antibody First Published in: Koromyslova et al, 2017. Nanobodies targeting norovirus capsid reveal functional epitopes and potential mechanisms of neutralization. PLoS Pathog. 2017 Nov 2;13(11):e1006636 [PMID:29095961](#)

Note on publication: Describes the isolation of Nano-4 from a phage display library and its characterisation through ELISA, ITC, and crystallography.

Product Form

Size: 200 µg Purified antibody.

Purification: Purified by Immobilized Metal Affinity Chromatography

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.