Anti-Norovirus P domain [Nano-4] Standard Size Ab01247-1.9

This chimeric mouse 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: Mouse IgG1-Fc fusion, His-Tagged
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 4ºC for up to 3 months. For longer storage, aliquot and store at -

20ºC.

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.