

Bioassayplus Inc.

4510 Rhodes Drive., Windsor, Canada N8W 5K5

Product Specification Sheet

Expiration date: 2 years after receiving the product in -20°C

Important Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product name: Group II norovirus capsid C terminal (P domain)

Catalog #: Noro2-cap-P

Description: Human norovirus can be classified into two groups, group I and group II. Norovirus is a positive sense RNA virus with 7.5 kb nucleotides, encoding a major structural protein VP1 with 50-55kDa. The full length of VP1 capsid contains three regions, S, hinge and P domain. N-terminal 225 amino acids is an essential element forming icosahedron.

P domain from 225 to 520 forms P1- P2-P1 structure. P domain has a receptor binding region to recognize human histo-blood group antigens (HBGAs). P domain expressed in bacteria can spontaneously form a P dimer and a P particle aggregated by 12 P dimers. P particle displays an enhanced binding activity to HBGAs higher than virus-like particle (VLP) formed by the full length capsid.

Most immunoreactive epitopes are located spanning from 275 to 417 amino acids, the peptide from 275 to 417 amino acids is directly exposed to outside to bind to the specific antibody.

P domain is also a good candidate for norovirus vaccine development. Sequence of group II VA387 strain capsid from 225 to 520 amino acids is expressed in *E. coli* with 30KDa, a 6 x his tag linked to its N-terminus.

Source: *E. coli*

Format: Purified, Liquid

Purification: >95% pure (10% SDS-PAGE, Coomassie stain), Proprietary chromatographic technique

Concentration: 1.82mg/ml (lot 07122023)

Buffer: PBS with 25mM K₂CO₃

Applications: ELISA, Western blot, vaccine study



Noro2-cap-P, lot 07122023, tested on July 12, 2023

Bound Noro II capsid	3.3ug	1.1ug	0.37ug	0.12ug	0.04ug	13.7ng	4ng	1.5ng
OD of Test	0.598	0.712	0.604	0.415	0.179	0.079	0.039	0.039
OD of control	0.05	0.05	0.05	0.07	0.06	0.06	0.06	0.07
Signal/BKG	18.76	14.24	12.08	5.92	2.93	1.3	0.65	0.56

Blocking buffer: PBS with 1.5%BSA, 1.5% Trehalose, 1.5% gelatin, 1:500 dilute antibody

Manufacture date: July 14, 2023