

12-8339: Anti-Norovirus, Capsid (Clone NORO-178)-Purified No Carrier Protein

Clonality :	Monoclonal
Clone Name :	NORO-178
Isotype :	Human IgG1
Immunogen Information :	Sequenced from PBMCs from a donor who had recovered from a naturally-occurring norovirus infection.

Description

Specificity: NORO-178 targets the capsid of a broad range of Norovirus genotypes, including GII.

Antigen Distribution: Norovirus infects and replicates in immune cells, including macrophages, dendritic cells, and B cells, as well as in enteroendocrine cells in the human gut.

Background: Norovirus is a highly contagious pathogen known for its ability to cause acute gastroenteritis, which is a major health concern worldwide¹. The virus's low infectious dose means minor exposure can lead to infection. Prolonged shedding by hosts and environmental resilience further heighten transmission risks through prolonged surface contamination². It is the leading cause of foodborne diseases, exclusively infecting humans³. Timely implementation of infection prevention measures is crucial for outbreak control². Studies have found a variety of antibodies that have a broad reactivity for noroviruses, including single-chain antibodies⁴, monoclonal antibodies⁵, and a cross-reactive monoclonal antibody⁶. These antibodies have the potential to be used in diagnostic applications as they have been shown to detect norovirus antigens in clinical samples. Studies have also found that the reactivity of these antibodies can vary depending on the norovirus strain⁷. NORO-178 is a monoclonal antibody with broad effectiveness against Norwalk virus genogroup II (GII), notably neutralizing various GII genotypes by blocking their interaction with human histo-blood group antigens (HBGAs). Its fragment antigen-binding (Fab) version is even more effective against GII.4 strains but doesn't block HBGA binding, suggesting NORO-178 neutralizes the virus by physically obstructing its attachment to host cells. This is likely due to the antibody's targeting of a universally conserved area within the viral capsid P-domain, underscoring NORO-178's potential in therapeutic applications against norovirus infections⁸.

Product Info

Amount :	1.0 mg / 250µg Purity: >=90% monomer by analytical SEC and SDS-Page
Purification :	Preparation: Recombinant antibodies are manufactured in an animal free facility using only in vitro protein free cell culture techniques and are purified by a multi-step process including the use of protein A or G to assure extremely low levels of endotoxins, leachable protein A or aggregates.
Content :	Formulation: This recombinant monoclonal antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added. Due to inherent biochemical properties of antibodies, certain products may be prone to precipitation over time. Precipitation may be removed by aseptic centrifugation and/or filtration.
Storage condition :	This antibody may be stored sterile as received at 2-8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at <= -70°C.