

12-8343: Anti-Norovirus, Capsid (Clone NORO-313)-Purified No Carrier Protein

Clonality : Monoclonal

Clone Name : NORO-313

Description

Specificity: NORO-313 activity is directed against the capsid of norovirus.

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-313 is a human monoclonal antibody with broad cross-reactivity and the capability to neutralize multiple genotypes of norovirus, highlighting its significant potential in the development of norovirus vaccines and diagnostic tools. It targets a highly conserved region in the P-domain of the norovirus capsid protein, suggesting its neutralization mechanism might involve steric hindrance through multivalent cross-linking. This clone's ability to recognize and neutralize diverse norovirus strains, including both GI and GII genogroups, underscores its importance in advancing our understanding and control of norovirus infections⁸.

Product Info

Amount : 1.0 mg / 250µg

Purity: $\geq 90\%$ 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.