

12-8341: Anti-Norovirus, Capsid (Clone NORO-303)-Purified No Carrier Protein

Clonality : Monoclonal

Clone Name : NORO-303

Description

Specificity:NORO-303 recognizes a highly conserved region in the P-domain of the norovirus capsid protein and is cross-reactive against norovirus genogroups I, II, III, and V.

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. The NORO-303 clone is a potential candidate for the development of a broadly cross-reactive norovirus vaccine, as it can neutralize multiple genotypes of norovirus. It suggests a mechanism of neutralization by steric hindrance, as it recognizes a highly conserved region in the P-domain of the norovirus capsid protein⁸. This clone can detect both GI and GII norovirus in clinical samples, indicating its potential use in diagnostics⁴. It further supports the potential of the norovirus capsid protein as a diagnostic tool by recognizing a previously unknown conformational epitope⁹. It has cross-reactivity against norovirus genogroups I, II, III, and V, suggesting its potential for detecting a wide array of norovirus strains⁶.

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.