

Product Information

Norovirus GI.1 Virus-like Particles (NoV GI.1 VLPs)

Cat. No.: **VLP-020YF**

This product is for research use only and is not intended for diagnostic use.

Recombinant Norovirus GI.1 Virus-like Particles (NoV GI.1 VLPs) are produced in Baculovirus/Insect cell expression system, assembled with VP1 structure protein. VLP is mimicking the native 3D structure of viruses which can elicit strong immune responses. However, VLPs lack viral genomic material which makes them non-infectious, unable to replicate and enhance the safety during manufacture and administration. NoV GI.1 VLPs can be used in the development of NoV GI.1 diagnostics and in vaccine development and R&D (including use as an immunogen).

Product Specifications

Structural Proteins

VP1

Expression Systems

Baculovirus/Insect cell expression system (please specify if other expression system is needed)

Purity

>90%

Buffer

PBS pH7.4

Form

Liquid

Alternative Names

Norovirus GI.1 Virus-like Particles; NoV GI.1 VLPs; Norovirus GI.1 Virus; NoV GI.1; VLP; Virus-like particle

Storage

Store at -80 °C long term. Avoid repeated freeze/thaw cycles.

Virus Background

Virus Family

Caliciviridae

Virus Species

Norovirus GI.1 Virus

Virus Strain

Hu/GI.1/CHA6A007/2010/USA

Virus Overview

Norovirus, also known as NoV, is in the Caliciviridae family. It's non-enveloped, positive-sense, single-stranded RNA virus. Noroviruses can genetically be classified into at least seven different genogroups (GI, GII, GIII, GIV, GV, GVI, and GVII), which can be further divided into different genetic clusters or genotypes. Most noroviruses that infect humans belong to genogroups GI and GII. The variant GII.4 has been identified as the most common cause of Norovirus outbreaks since 2002. The norovirus genome encodes a large polyprotein which is cleaved into six smaller non-structural proteins (NS1/2 to NS7) by the viral 3C-like protease (NS6), a major structural protein (VP1) of about 58~60 kDa and a minor capsid protein (VP2).

It's a very contagious virus that causes gastroenteritis. People of all ages can get infected and sick with norovirus. The symptoms of norovirus infection include nausea, vomiting, stomach pain or cramps, watery or loose diarrhea, feeling ill, low-grade fever, muscle pain. Most noroviruses that infect humans belong to genogroups GI and GII.

The NoV infection can be confirmed by laboratory testing such as virus isolation, RT-PCR, and serology.

Virus Structure

Non-enveloped, positive-sense, single-stranded RNA virus

Related Disease

Gastroenteritis