

# Product Information

## Type 1 Poliovirus Virus-like Particles (PV-1 VLPs)

Cat. No.: **VLP-001YF**

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

Recombinant Type 1 Poliovirus Virus-like Particles (PV-1 VLPs) are produced in Baculovirus/Insect cell expression system. 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. PV-1 VLPs can be used in the development of PV-1 diagnostics and in vaccine development and R&D (including use as an immunogen).

## Product Specifications

### Expression Systems

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

### Form

Liquid

### Alternative Names

Poliovirus; Type 1 Poliovirus; Type-1 Poliovirus; PV1; PV-1; PV; VLP; Virus-like particle

### Storage

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

## Virus Background

### Virus Family

Picornaviridae

### Virus Species

Enterovirus C

### Virus Overview

Poliovirus (PV) is the causative agent of polio, which is also known as poliomyelitis. Poliovirus is a serotype of the species Enterovirus C, in the family of Picornaviridae. PV is composed of an RNA genome and a protein capsid. The genome is a single-stranded positive-sense RNA genome that is about 7500 nucleotides long. The viral particle is about 30 nm in diameter with icosahedral symmetry. Because of its short genome and its simple composition-only RNA and a nonenveloped icosahedral protein coat that encapsulates it, poliovirus is widely regarded as the simplest significant virus.

### Virus Structure

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

### Related Disease

Polio disease