ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Poliomyelitis Virus 1-3 Antibodies and Conjugates

□ Cat. # POLV13-A	Goat Anti-Poliomyelitis Virus 1-3 IgG	**SIZE**: 100 ul
□ Cat. # POLV13-FITC	Goat Anti-Poliomyelitis Virus 1-3 IgG -FITC conjugate	**SIZE**: 0.5 ml
□ Cat. # POLV13-BTN	Goat Anti-Poliomyelitis Virus 1-3 IgG -Biotin conjugate	**SIZE**: 0.5 ml
□ Cat. # POLV13-HRP	Goat Anti-Poliomyelitis Virus 1-3 IgG-HRP Conjugate	**SIZE**: 0.5 ml

Poliomyelitis, often called polio or infantile paralysis, is an acute viral infectious disease spread from person to person, primarily via the fecal-oral route. Although around 90% of polio infections cause no symptoms at all, affected individuals can exhibit a range of symptoms if the virus enters the blood stream. Spinal polio is the most common form, characterized by asymmetric paralysis that most often involves the legs. Bulbar polio leads to weakness of muscles innervated by cranial nerves. Bulbospinal polio is a combination of bulbar and spinal paralysis.

The term poliomyelitis is used to identify the disease caused by any of the three serotypes of poliovirus. Type 1 (Brunhilde): often with severe symptoms Type 2 (Lansing): with milder symptoms Type 3 (Leon): rare, but with severe symptoms. Two basic patterns of polio infection are described: a minor illness which does not involve the central nervous system (CNS), sometimes called abortive poliomyelitis, and a major illness involving the CNS, which may be paralytic or non-paralytic. A laboratory diagnosis is usually made based on recovery of poliovirus from a stool sample or a swab of the pharynx. Antibodies to poliovirus can be diagnostic, and are generally detected in the blood of infected patients early in the course of infection. Analysis of the patient's cerebrospinal fluid (CSF), which is collected by a lumbar puncture ("spinal tap"), reveals an increased number of white blood cells (primarily lymphocytes) and a mildly elevated protein level. Detection of virus in the CSF is diagnostic of paralytic polio, but rarely occurs.

Source of Antigen and Antibodies

Antigen	Pool of purified polio virus 1-3
Ab Host/type	Goat, purified IgG (#POLV13-A)
2-Ab	**Rabbit Anti-goat IgG-HRP conjugate** Cat # 30220 (AP, biotin, FITC conjugates also available)
-ve	# 20011-1, Goat (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control

Cat# POLV13-A, unlabeled

Purified antibody is supplied in PBS, pH 7.4 at 1 mg/ml (or see lot sp concn on the vial) in 100ug/100 ul in PBS or lyophilized in PBS. Store powder or stock solution at -20oC for long term storage. Reconstitute powder in 100 ul PBS and store in suitable size aliquots. Avoid freeze and thaw.

Cat# POLV13-FITC, FITC-conjugate

Purified IgG was coupled to FITC at F/P ratio ~3:7. The antibody is supplied in PBS, pH 7.4, 0.2% BSA and 0.05% azide in either **lyophilized** (0.5 ml) or **liquid** form (0.5 ml). Reconstitute powder in PBS in 0.1 ml to prepare stock solution. Store at -20oC in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw.

Suggested conjugate dilutions are 1:10--1:100 for immunofluorescence.
Absorption Wavelength: 495 nm
Emission Wavelength: 528 nm

Cat# POLV13-BTN, Biotin-conjugate

Purified antibody was coupled to Biotin using Biotinamidocaproate N-Hydroxysuccinimide Ester (BAC**)** at F/P ratio ~10-20:1. The antibody is supplied in PBS, pH 7.4, 0.2% BSA and 0.05% azide in either **lyophilized** (500 ul) or **liquid** form (500 ul). Reconstitute powder in PBS in 50 ul to prepare stock solution (it is also possible to dissolve the powder in 0.5 ml to make 1:10 diluted stock). Store at -20oC in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw.

Suggested conjugate dilutions are 1:5,000-1:30,000 ELISA, 1:2K-1:10K for western; 1:1000-1:5000 for IHC/IF.

User must test and optimize the dilution for a given application.

Cat# POLV13-HRP, HRP-conjugate

Purified antibody was coupled to HRP (RZ>3.0) using periodate method. The molar enzyme to protein (E/P) ratio = 4.0. The antibody is supplied in stabilizing buffer, 0.1% prolcin-300 as preservative in either **lyophilized** or **liquid** form (0.5.5 mg/ml). Reconstitute powder in PBS in 0.5 ml. Store at 4oC in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw.

Suggested conjugate dilutions are 1:1,000-1:10,000 ELISA, 1:1K-1:5K for western, and 1:200-1:1000 (IHC).

Specificity & Cross-reactivity

Antibodies react with Polio viruses types 1-3.

**This product is for In vitro research use only.*

Related items available from ADI

Recombinant Poliovirus 1, VP1 protein (Sabin) and antibodies

Catalog#	Prod Description
970-100-PHG	Human Anti-Poliomyelitis Virus 1-3 IgG ELISA
970-120-PMG	Mouse Anti-Poliomyelitis Virus 1-3 IgG ELISA
970-130-PRG	Rabbit Anti-Poliomyelitis Virus 1-3 IgG ELISA
970-140-PRM	Rabbit Anti-Poliomyelitis Virus 1-3 IgM ELISA
970-150-PMG	Monkey Anti-Polio Virus 1-3 IgG ELISA Kit,
POLV11-S	Anti-Poliomyelitis Virus 1-3 antiserum
POLV12-M	Mouse monoclonal Anti-Polio Virus 1-3 IgG,
POLV13-A	Anti-Poliomyelitis Virus 1-3 IgG
POLV13-BTN	Anti-Polio Virus 1-3 IgG-Biotin Conjugate
POLV13-FITC	Anti-Polio Virus 1-3 IgG-FITC Conjugate
POLV13-HRP	Anti-Polio Virus 1-3 IgG-HRP Conjugate

POLV13-S-BTN-FITC-HRP 170131SV

Alpha Diagnostic Intl Inc., 6203 Woodlake Center Dr, San Antonio, TX 78244, USA; **Email**: service@4adi.com
☎ (800) 786-5777; (210) 561-9515; **Fax**: (210) 561-9544; **Web Site**: www.4adi.com