Polio Virus, 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. In about 1% of cases the virus enters the central nervous system, preferentially infecting and destroying motor neurons, leading to muscle weakness and acute flaccid paralysis. Different types of paralysis may occur, depending on the nerves involved. 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. 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. In most people with a normal immune system, a poliovirus infection is asymptomatic. The virus enters the body via the fecal-oral route. Within 4 to 21 days, the virus spreads via the blood stream to the spinal cord and brain, infecting the neurons that control movement. The virus divides in the nerves involved, which can result in paralysis.

In most people with a normal immune system, a poliovirus infection is asymptomatic. The virus enters the body via the fecal-oral route. Within 4 to 21 days, the virus spreads via the blood stream to the spinal cord and brain, infecting the neurons that control movement. The virus divides in the nerves involved, which can result in paralysis.

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.

Two types of vaccines are used throughout the world to combat polio. The first is Salk vaccine, or inactivated poliovirus vaccine (IPV), is based on poliovirus grown in a type of monkey kidney tissue culture (Vero cell line), which is chemically inactivated with formalin. Subsequently, Albert Sabin developed another live, oral polio vaccine (OPV). It was produced by the repeated passage of the virus through non-human cells at sub-physiological temperatures.

ADI has developed antibody ELISA kits to determine the efficacy of various existing vaccines and test new vaccines. ADI is further expanding the antibody ELISAs to measure IgG (and IgG1, IgG2a, IgG3, IgG4) and IgM classes. The ADI's Poliomyelitis IgG ELISA Kit is an immunoassay suitable for detecting IgG in serum, plasma or other biological fluids. ADI has also introduced industry's first ELISA for direct testing of Diphtheria Toxoid adsorbed on Alum (for vaccine identification and testing) or in purified/semi-purified preparations of toxoid during vaccine manufacturing.

Related ELISA kits (See Details at the website)

http://4adi.com/Commerce/catalog/spcategory.jsp?category_id=2727

<table>
<thead>
<tr>
<th>Items Description</th>
<th>Species</th>
<th>Antibody Type IgG Cat#</th>
<th>Antibody Type IgM Cat#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polio Vaccine Antibody ELISA Kits</td>
<td>Human</td>
<td>970-100-PHG</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mouse</td>
<td>970-120-PMG</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rabbit</td>
<td>970-130-PRG</td>
<td>970-130-PRM</td>
</tr>
<tr>
<td></td>
<td>Monkey</td>
<td>970-150-PMG</td>
<td></td>
</tr>
</tbody>
</table>

Polio Related Antibodies, Peptides, and Recombinant Proteins Ordering Information
(See Details at the website) http://4adi.com/Commerce/catalog/spcategory.jsp?category_id=2727

<table>
<thead>
<tr>
<th>Item</th>
<th>Catalog #</th>
<th>Product Description</th>
<th>Product Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poli Virus</td>
<td>POLV11-S</td>
<td>Rabbit Anti-Poliomyelitis Virus 1-3 antiserum</td>
<td>Antibodies</td>
</tr>
<tr>
<td></td>
<td>POLV12-M</td>
<td>Mouse monoclonal Anti-Poliomyelitis Virus 1-3 IgG, aff pure</td>
<td>Antibodies</td>
</tr>
<tr>
<td></td>
<td>POLV13-A</td>
<td>Goat Anti-Poliomyelitis Virus 1-3 IgG</td>
<td>Antibodies</td>
</tr>
<tr>
<td></td>
<td>POLV13-BTN</td>
<td>Goat Anti-Poliomyelitis Virus 1-3 IgG-Biotin Conjugate</td>
<td>Antibodies</td>
</tr>
<tr>
<td></td>
<td>POLV13-FITC</td>
<td>Goat Anti-Poliomyelitis Virus 1-3 IgG-FITC Conjugate</td>
<td>Antibodies</td>
</tr>
<tr>
<td></td>
<td>POLV13-HRP</td>
<td>Goat Anti-Poliomyelitis Virus 1-3 IgG-HRP Conjugate</td>
<td>Antibodies</td>
</tr>
</tbody>
</table>

Polio_Vaccine_Flr Rev. 130207A