

Product Specification Sheet

**Adenovirus Antibodies**

**Cat.** ADV17-M      **Monoclonal Anti-Adenovirus type (pan, reacts with all human serotypes) IgG, aff pure**      **SIZE:** 100 ul

The adenovirus is an ubiquitous pathogen of humans and animals. Adenoviruses are characterized by location inside the cell nucleus, common complement-fixing antigens and marked stability to environmental effects. Adenoviruses are endemic in all populations throughout the year. The infection is spread both through the aerial-droplet route and the routes characteristic for intestinal infections. The incubation period is between five and seven days. Adenoviruses mainly infest respiratory and intestinal mucosa, but also the cornea. They are accumulated in the epithelial cells and regional lymph nodes. Adenoviruses cause the widest variety of illnesses of the known respiratory viruses. The adenovirus infection is the most frequently caused viral disease of the respiratory tract among preschool children (types 1- 5 and 7). Acute diseases of the upper respiratory tract occur predominantly. Pneumonia is the most severe form of adenoviral infection occurring mostly in infants below the age of one. Adenoviruses also cause outbreaks of swimming-pool associated pharyngo conjunctival fever in the summer and epidemics of kerato-conjunctivitis of both children and adults. The intestinal form of adenoviral infection occurs mostly in children below the age of one. An acute adenoviral infection can be detected by virus isolation and/or serology. The serologic tests are particularly important because they document actual infection in the patient and can be applied to large scale epidemiologic investigations. The CF and ELISA tests measure predominantly the antibodies directed against the group-specific determinants on the hexon component.

The hexon is the major capsid protein of the adenovirus and is composed of three identical large polypeptide chains, each containing approximately 1000 residues, which require about 8% of the coding capacity of the viral genome. The viral shell has a total of 240 such capsomers which assemble in groups of nine to constitute the major part of the 20 triangular surfaces of the adenovirus icosahedron. The major structural features are shared by adenovirus of all serotypes, but the hexon polypeptide, as well as other capsid proteins, differ in size and immunological properties between serotypes. Different forms of hexon from one serotype have also been described.

**Source of Antigen and Antibodies**

|                            |  |
|----------------------------|--|
| <b>Antigen</b>             | Adenovirus Type 3 (ATCC strain VR847)  |
| <b>Antibody host/type</b>  | Mouse, monoclonal IgG (Cat # <b>ADV17-M</b> );   |
| <b>Secondary Ab</b>        | <b>Goat Anti-mouse IgG-HRP conjugate</b><br>Cat # 40320 (AP, biotin, FITC conjugates also available)   |
| <b>Negative Control Ab</b> | Cat # 20008-1, Mouse (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as –ve control |

**Form & Storage of Antibodies/Peptide Control**

**Affinity pure IgG**

100 ul      solution      lyophilized powder  
Supplied in **Buffer:** PBS+0.1% BSA and 0.05% azide  
Dissolve powder in 100 ul water.

**Storage**

**Short-term:** unopened, undiluted liquid vials at -20°C and powder at 4°C or -20°C.

**Long-term:** at -20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20°C or below.

**Shipping:** 4°C for solutions and room temp for powder

**Recommended Usage**

**Western Blotting** (1:250-1:1000) using Chemiluminescence technique.

**ELISA** (1:10K-1:100K; using 50-100 ng of control peptide/well).

**Histochemistry & Immunofluorescence.** We recommend the use of affinity purified antibody at 2-10 ug/ml in formaldehyde fixed, paraffin-embedded tissues.

**Specificity & Cross-reactivity**

Recognizes all human serotypes of Adenovirus.

**General References:** Philipson L (1979) Adv. Virus. Res. 25, 357-405; Pettersson U (1971) virology 84, 123-136; Bulanger P (1978) Virology 84, 456-468; Harrison SC (2010) Science 329, 1026-1027; \*This product is for in vitro research use only.

**Related material available from ADI**

|                     |   |
|---------------------|---|
| 950-100-AHA         | Human Anti-Adenovirus IgA ELISA kit   |
| 950-110-AHG         | Human Anti-Adenovirus IgG ELISA kit   |
| 950-120-AHM         | Human Anti-Adenovirus IgM ELISA kit   |
| 950-130-AMG         | Mouse Anti-Adenovirus IgG ELISA kit   |
| 950-140-AMM         | Mouse Anti-Adenovirus IgM ELISA kit   |
| ADV11-BTN conjugate | Anti-Adenovirus type 2, hexon IgG-Biotin conjugate  |
| ADV11-FITC          | Anti-Adenovirus type 2, hexon IgG-FITC conjugate  |
| ADV11-HRP           | Anti-Adenovirus type 2, hexon IgG-HRP conjugate   |
| ADV11-S             | Anti-Adenovirus type 2, hexon antiserum (reacts with 1-7a, 8, 31, 40-41)                  |
| ADV12-FITC          | Monoclonal Anti-Adenovirus (many isotypes) IgG-FITC conjugate                             |
| ADV12-M hexon IgG   | Monoclonal Anti-Adenovirus (many isotypes) hexon IgG                                      |
| ADV17-M             | Monoclonal Anti-Adenovirus type 40 IgG, aff pure  |
| ADV17-M             | Monoclonal Anti-Adenovirus type 41 IgG, aff pure  |
| ADV17-M pure        | Monoclonal Anti-Adenovirus type 40/41 IgG, aff pure                                       |
| ADV17-M             | Monoclonal Anti-Adenovirus hexon (types 1, 5, 8, 27) IgG                                  |
| ADV17-M             | Monoclonal Anti-Adenovirus type (pan, reacts with all human serotypes) IgG, aff pure      |
| ADV65-N             | Adenovirus (strain Adenoid 6) type 2, semi-pure viral lysate (antigens, host MRC-5 cells) |
| ADV66-N             | Adenovirus (strain Adenoid 6) type 2 hexons antigens, purified (host Vero cells)          |
| ADV17-M             | 110418A   |

Alpha Diagnostic Intl Inc., 6203 Woodlake Center Dr, San Antonio, TX 78244, USA; **Email:** [service@4adi.com](mailto:service@4adi.com)

**India Contact:**

**Life Technologies (India) Pvt. Ltd.**

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444  
Email: [customerservice@lifetechindia.com](mailto:customerservice@lifetechindia.com) Website: [www.lifetechindia.com](http://www.lifetechindia.com)