

Product Specification Sheet

Adenovirus Antibodies

<input type="checkbox"/> Cat. ADV12-M	Monoclonal Anti-Adenovirus (many istoypes) hexon IgG	SIZE: 100 ul
<input type="checkbox"/> Cat. ADV12-FITC	Monoclonal Anti-Adenovirus (many istoypes) hexon IgG-FITC conjugate	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 adenovirion and is composed of three identical large polypeptide chains, each containing approximately 1000 residues. 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

Antigen	Adenovirus type 3 (ATCC strain VR847)
Antibody host/type	Mouse, monoclonal IgG1 (Cat # ADV12-M) unlabeled or Coupled to FITC (# ADV12-FITC)
Secondary Ab	Goat Anti-mouse IgG-HRP conjugate Cat # 40320 (AP, biotin, FITC conjugates also available)
Negative Control Ab	Cat # 20008-1, Mouse (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

Isotype Controls

20102-101	Mouse IgG1 isotype control, purified
20102-101-1	Mouse IgG1 isotype control, purified
20102-101-APC	Mouse IgG1-APC conjugate (isotype control)
20102-101-B	Mouse IgG1-Biotin conjugate (isotype control)
20102-101-F	Mouse IgG1-FITC conjugate (isotype control)
20102-101-FP	Mouse IgG1-FITC-PE conjugate (isotype control)
20102-101-HP	Mouse IgG1-HRP conjugate (isotype control)
20102-101-PC5	Mouse IgG1-PE-Cy5 conjugate (isotype control)
20102-101-PE	Mouse IgG1-PE conjugate (isotype control)

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG and FITC Conjugates

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

Cat# ADV12-FITC, FITC-conjugate

Purified antibody 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** (0.1 ml) or **liquid** form (0.1 ml). Reconstitute powder in water (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 1:200-1:2000 for immunofluorescence.

Absorption Wavelength: 495 nm
Emission Wavelength: 528 nm

Stability: 6-12 months at -20oC or below.
Shipping: 4oC 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. Not tested..

Specificity & Cross-reactivity

Adenovirus hexon proteins of at least 21 serotypes including types 40 and 41.

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	Anti-Adenovirus type 2, hexon IgG-Biotin
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
ADV12-M	Monoclonal Anti-Adenovirus (many istoypes)
ADV13-M	Monoclonal Anti-Adenovirus type 40 IgG, aff pure
ADV14-M	Monoclonal Anti-Adenovirus type 41 IgG, aff pure
ADV15-M	Monoclonal Anti-Adenovirus type 40/41 IgG,
ADV16-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
ADV12-M	140521A