ALPHA DIAGNOSTIC INTERNATIONAL

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Product Specification Sheet

Adenovirus Type 41 Antibodies

Cat. ADV14-M Monoclonal Anti-Adenovirus type 41 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 adenovirion 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

Antigen	Adenovirus Serotype 41
Antibody host/type	Mouse, monoclonal IgG1k (Cat # **ADV14-M**);
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

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 -20OC and powder at 4oC or -20oC..

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

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

Specificity & Cross-reactivity

Antibodies are specific for Adenovirus Serotype 41 and show minimal reactivity with Serotype 40.

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 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 Monoclonal Anti-Adenovirus (many istoypes) hexon IgG
ADV14-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, aff pure
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
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)

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