

Monoclonal Antibody to Adenovirus Type 2 + 5 (E1A) - Purified

Alternate names: Adenovirus antibody

Catalog No.: AM00315PU-N

Quantity: 0.1 mg

Concentration: 0.2 mg/ml

Background: Adenoviruses are DNA viruses generally widespread in nature that are frequently the cause of acute upper respiratory tract infections (i.e. common colds). Forty-seven known serotypes have been isolated since they were first discovered in 1953 with 3 types known to cause gastroenteritis. Several types have oncogenic potential though most cause self-limiting febrile illnesses characterised by inflammation of conjunctivae and the respiratory tract. The virus can be isolated from the majority of tonsils/adenoids surgically removed, indicating latent infections. It is not known how long the virus can persist in the body, or whether it is capable of reactivation after long periods. In patients experiencing immunosuppression (e.g. AIDS) it can be reactivated causing disease.

The adenovirus early gene product E1A is a potent stimulator of cellular proliferation, which when overexpressed can overcome the growth-inhibitory effects of TGF-beta. The E1A region encodes a series of related proteins (35-46 kDa) with multifunctional capabilities and form a specific complex with the retinoblastoma tumor suppressor gene product (Rb protein). The E1A and E1B regions together comprise the transforming region of adenovirus. While expression of E1A alone is sufficient to immortalize primary cells, complete transformation requires the additional expression of the E1B region. Several conserved regions of E1A are similar to portions of other viral oncoproteins like the HPV-16 and HPV-18 E7 and SV40 large T antigen.

Host / Isotype: Mouse / IgG2a

Recommended Isotype Controls: AM03096PU-N

Clone: M58+M73

Immunogen: Adenovirus.

Format: **State:** Liquid ascites
Purification: Protein A chromatography
Buffer System: 10 mM PBS, pH 7.4, with 0.2 % BSA and 0.09 % sodium azide.

Applications: Immunofluorescence.
Immunoprecipitation (Native verified): Use Protein A; Ab 2 µg/mg protein lysate.
Western Blotting: Ab at 1µg/ml for 2 hrs at RT. Immunohistology (Formalin/paraffin): Use Ab at 1-2µg/ml for 30 minute at RT. Staining of formalin-fixed tissues requires boiling tissue

sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min.
Recommended positive control: 293 Cells or Adenovirus infected tissues.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This Adenovirus antibody detects Adenovirus Type 2 + 5 E1A.
Cellular Localization: Nuclear.
Species: Adenovirus.
Other species not tested.

Storage: Store the antibody undiluted at 2-8°C for one month or in (aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

1. Harlow E, et al. (1986) Mol Cell Biol, 6:1579-1589
2. Harlow E, et al. (1985) J Virol, 3:533-546.
3. Whyte P, et al. (1988) Nature, 334:124-129
4. Klein g, et al. (1987) Science 238:1539-1544

Pictures: Formalin-fixed, paraffin-embedded human infected appendix stained with Adenovirus Antibody (AM00315PU-N) using peroxidase-conjugate and DAB chromogen. Note nuclear and cytoplasmic staining of infected epithelial cells.

