

Adenovirus-9 E4 Orf1 Antibody

Catalog # ASC10744

Specification

Adenovirus-9 E4 Orf1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes

E <u>P89079</u> <u>P89079</u>, <u>62510674</u> Virus Rabbit Polyclonal IgG Ad-9 E4 Orf1 antibody can detect 10ng Ad-9 E4 Orf1 peptide in ELISA at 1 μg/mL.

Adenovirus-9 E4 Orf1 Antibody - Additional Information

Gene ID Target/Specificity E4; 6386282

Reconstitution & Storage

Adenovirus-9 E4 Orf1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

Adenovirus-9 E4 Orf1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Adenovirus-9 E4 Orf1 Antibody - Protein Information

Name E4

Function

Plays a key role in virus oncogenecity in animals. Binds and sequesters human MUPP1/MPDZ protein in the cytoplasm, preventing it from playing a role in cellular proliferation regulation. Induces cell transformation, probably by inactivating MPDZ protein.

Cellular Location Host cytoplasm.

Adenovirus-9 E4 Orf1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.



- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Adenovirus-9 E4 Orf1 Antibody - Images

Adenovirus-9 E4 Orf1 Antibody - Background

Adenovirus-9 E4 Orf1 Antibody: The many different serotypes of human adenoviruses (Ad) are divided into six subgroups, of which all Ad subgroup A and B and two subgroup D Ads can elicit tumors in infected rodents. Unlike the Ads from subgroup A and B, the ones from subgroup D, Ad9 and Ad10 elicit estrogen-dependent mammary tumors as opposed to undifferentiated sarcomas. In the case of Ad9, its tumorigenicity is dependent on the product of the open reading frame (ORF) 1 of the early region 4 (E4). The tumorigenic potential of Ad9 E4 Orf1 depends on a carboxyl-terminal PDZ domain-binding motif that mediates interactions with several different membrane-associated cellular proteins such as MUPP1, PATJ, MAGI-1, ZO-2 and Dlg1. It has been suggested that Ad9 E4 Orf1 may have evolved from an ancestral cellular dUTP pyrophosphatase.

Adenovirus-9 E4 Orf1 Antibody - References

Shenk T. Adenoviridae: the viruses and their replication, p. 2265-2300 in DM Knipe and PM Howley (ed.) Fields virology, 4th ed.Vol. 2. 2001. Lippincott-Raven Publishers, Philadelphia, PA. Javier R, Rasha Jr. K, Macdonald GJ, et al. Human adenovirus type 9-induced rat mammary tumors. J. Virol.1991; 65:3192-202.

Javier RT. Adenovirus type 9 E4 open reading frame 1 encodes a transforming protein required for the production of mammary tumors in rats. J. Virol.1994; 68:3917-24.

Weiss RS, Lee SS, Prasad BV, et al. Human adenovirus early region 4 open reading frame 1 genes encode growth-transforming proteins that may be distantly related to dUTP pyrophosphatase enzymes. 1997; J. Virol.1997; 71:1857-70.