

Adenovirus-9 E4 Orf1 Antibody

Catalog # ASC10744

Product Information

Application	E
Primary Accession	P89079
Other Accession	P89079 , 62510674
Reactivity	Virus
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	14041
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Ad-9 E4 Orf1 antibody can detect 10ng Ad-9 E4 Orf1 peptide in ELISA at 1 μ g/mL.

Additional Information

Other Names	E4-ORF1, 3.6.1.23, Early E4 14.0 kDa protein, ORF1, Probable dUTPase E4 ORF1, E4
Target/Specificity	E4;
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.

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.

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.

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.

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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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.