



## Adenovirus-9 E4 Orf1 Antibody

### *Adenovirus-9 E4 Orf1: Ad-9 E4 Orf1*

**CATALOG No.:4749**

#### **BACKGROUND:**

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 (reviewed in 1). 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 (2). 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) (3). 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 (3). It has been suggested that Ad9 E4 Orf1 may have evolved from an ancestral cellular dUTP pyrophosphatase (4).

#### **SOURCE:**

Rabbit polyclonal Ad-9 E4 Orf1 antibody was raised against a 16 amino acid peptide near the carboxy terminus of the Ad-9 E4 Orf1 (GenBank accession no. P89079).

#### **APPLICATION:**

Ad-9 E4 Orf1 antibody can detect 10ng Ad-9 E4 Orf1 peptide in ELISA at 1 µg/ml. (Optimal dilution should be determined by user.) Other applications are pending. **For research use only.**

#### **STORAGE:**

Ad-9 E4 Orf1 antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.

#### **RELATED PRODUCTS:**

Blocking Peptide, Catalog No. **4749P**.

#### **REFERENCES:**

1. 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.
2. Javier R, Rasha Jr. K, Macdonald GJ, et al. Human adenovirus type 9-induced rat mammary tumors. *J. Virol.* 1991; 65:3192-202.
3. 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.
4. 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. (08-01D)