



# Mouse anti-Human Adenovirus Type 5 E1A monoclonal antibody, clone N69 (CABT-B9175)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

Immunogen	A trpE-E1A fusion protein
Isotype	IgG2a
Source/Host	Mouse
Species Reactivity	Human
Clone	N69
Purification	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Conjugate	Unconjugated
Applications	WB; IF; IP
Format	Liquid
Concentration	0.5 mg/ml
Size	100 µg
Buffer	Aqueous buffered solution containing ≤0.09% sodium azide.
Storage	Store undiluted at -20°C.

## BACKGROUND

**Introduction** Human adenoviruses are widely used as models for studying cellular transformation and

regulation of gene expression. The adenovirus E1A region plays a central role in each of these processes. This region of the viral genome encodes a series of related proteins with multifunctional capabilities. E1A regulates the transcriptional regulation of a wide variety of viral and cellular promoters. Most commonly, this results in the activation of transcription from the target promoter. In other cases, transcription from the targeted promoter is repressed by the action of E1A. E1A proteins also contribute to the transforming capabilities of adenoviruses. 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 other oncogenes, including the activated H-ras oncogene and polyoma middle T antigen, can complement E1A by substituting for E1B in transformation assays. Similarly, E1A can be replaced by polyoma large T antigen, c-myc and mutated p53 protein. Several conserved regions of E1A are strikingly similar to portions of other viral oncoproteins, e.g., HPV-16, HPV-18 E7 and SV40 large T antigen. Like HPV E7 and SV40 large T antigen, E1A proteins can form a specific complex with the retinoblastoma tumor suppressor gene product (Rb protein). Complex formation between the products of oncogenes and tumor suppressor genes are believed to be important in cellular transformation. The exact mechanism(s) of these complexes are not fully understood, however they may be involved in negative regulation of cellular growth and/or differentiation. M58 recognizes Adenovirus Type 5 E1A proteins.<sup>4</sup> A trpE-E1A fusion protein was used as immunogen. The fusion protein contained the C-terminal 266 amino acids of the 13S E1A protein. This is about 90% of the E1A 13S coding sequence.

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**Keywords**

Adenovirus 5; Adenoviridae

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