Qty: 50 µg/100 µl

Mouse anti-p300
Catalog No. 33-7600

Lot No.

Mouse anti-p300

FORM
This monoclonal antibody is highly purified from mouse ascites by protein A chromatography. The antibody is supplied as a 100 µl aliquot at a concentration of 0.5 mg/ml in PBS, pH 7.4, containing 0.1% sodium azide.

CLONE: NM-11 **ISOTYPE:** IgG_1

IMMUNOGEN
Recombinant human p300 protein.

SPECIFICITY
This antibody reacts with human p300. It does not react with mouse or rat p300. The epitope bound by this antibody has not been determined.

USAGE
Working concentrations for specific applications should be determined by the investigator. Appropriate dilutions will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. We recommend the following ranges as starting points for this product.

Application	Amount	Positive Control
Immunofluorescence	1-5 µg/ml	A431, HeLa or ML-1 cells
Immunohistochemistry (frozen)	not tested	
Immunohistochemistry (staining of formalin fixed, paraffin embedded tissue requires HIER* pretreatment)	1-5 µg/ml	any tissue
Immunoprecipitation[11] (autoradiographic detection)	1 µg/sample	A431, HeLa or ML-1 cells
Western Blotting (chemiluminescence detection)	1 µg/ml	A431, HeLa or ML-1 cells

* HIER: Heat induced epitope retrival. Contact Invitrogen Technical Service for protocol

STORAGE
Store at 2-8°C for up to one month. Store at -20°C for long term storage. Avoid repeated freezing and thawing.

BACKGROUND
p300 is a nuclear phosphoprotein which was originally shown to specifically bind to adenovirus E1A protein[1-3]. The binding of p300 to E1A occurs in the conserved region 1 (CR1) of E1A at a site which is close to but non-overlapping with that for the Rb family of proteins including p105 and p107[4,5]. p300 has been shown to bind to the extreme N-terminal region requiring the presence of positively charged residues at positions 2 and 3 of E1A via a zinc-finger motif in the C-terminal portion of p300[5-8]. While the binding of p300 and Rb to E1A is independent, it has been shown that upon binding, E1A mediates the physical contact between the two proteins[5]. The p300 protein is actively phosphorylated in both quiescent and proliferating cells however the amount of phosphorylation increases during progression from late G1 into M phase of the cell cycle[1,9]. In addition to the demonstrated binding of p300 to E1A it has also been shown to bind to other molecules including DNA (in a site specific manner) and to components of the TATA binding protein complexes (TBP)[10,11]. The TBP complex association is most likely with TFUD and occurs in a protein-protein dependent rather than DNA dependent manner and, in such a complex, p300 functions as a co-activator of transcription[11,12]. CPB is similar both structurally and functionally to p300.

(cont'd)

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RELATED PRODUCTS

Product	***Conjugate***	***Cat. No.***
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	Biotin	81-6540
rec-Protein G	Sepharose® 4B	10-1241
Protein A	Sepharose® 4B	10-1041

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