

## p300 Antibody

Catalog No: #33459

Package Size: #33459-1 50ul #33459-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

## Description

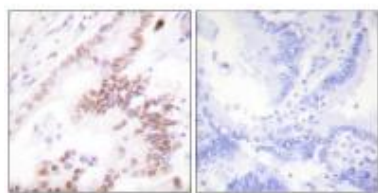
Product Name	p300 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB IHC
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total p300 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from N-terminal of human p300.
Target Name	p300
Other Names	E1A-associated protein p300; EP300; P300 transcription coactivator homolog;
Accession No.	Swiss-Prot: Q09472NCBI Gene ID: 2033
Uniprot	Q09472
GeneID	2033;
SDS-PAGE MW	264kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

## Application Details

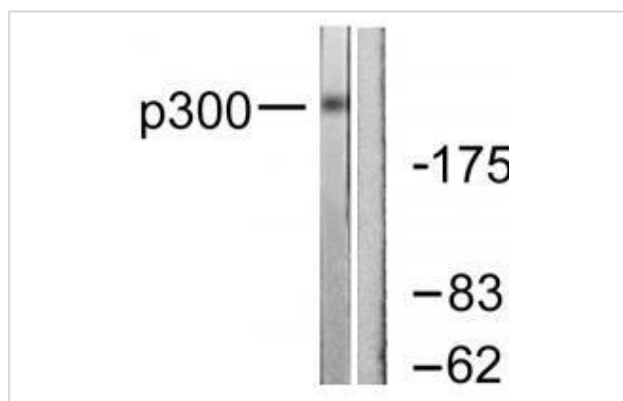
Western blotting: 1:500~1:3000

Immunohistochemistry: 1:50~1:100

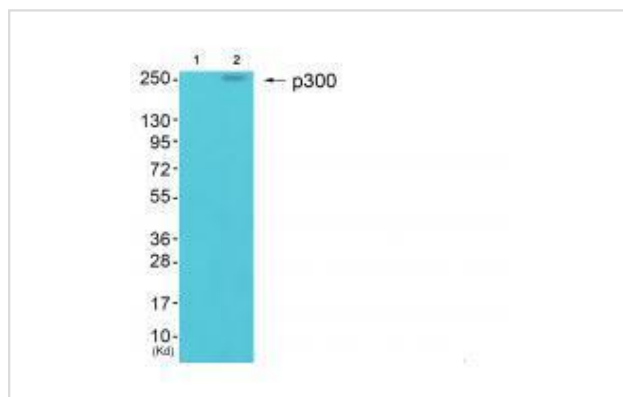
## Images



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue using p300 antibody #33459.



Western blot analysis of extracts from MDA-MB-435 cells, using p300 antibody #33459.



Western blot analysis of extracts from HepG2 cells (Lane 2), using p300 antibody #33459. The lane on the left is treated with synthesized peptide.

## Background

Functions as histone acetyltransferase and regulates transcription via chromatin remodeling. Acetylates all four core histones in nucleosomes. Histone acetylation gives an epigenetic tag for transcriptional activation. Mediates cAMP-gene regulation by binding specifically to phosphorylated CREB protein. Mediates acetylation of histone H3 at 'Lys-122' (H3K122ac), a modification that localizes at the surface of the histone octamer and stimulates transcription, possibly by promoting nucleosome instability. Mediates acetylation of histone H3 at 'Lys-27' (H3K27ac). Also functions as acetyltransferase for nonhistone targets. Acetylates 'Lys-131' of ALX1 and acts as its coactivator in the presence of CREBBP. Acetylates SIRT2 and is proposed to indirectly increase the transcriptional activity of TP53 through acetylation and subsequent attenuation of SIRT2 deacetylase function. Acetylates HDAC1 leading to its inactivation and modulation of transcription. Acts as a TFAP2A-mediated transcriptional coactivator in presence of CITED2. Plays a role as a coactivator of NEUROD1-dependent transcription of the secretin and p21 genes and controls terminal differentiation of cells in the intestinal epithelium. Promotes cardiac myocyte enlargement. Can also mediate transcriptional repression. Binds to and may be involved in the transforming capacity of the adenovirus E1A protein. In case of HIV-1 infection, it is recruited by the viral protein Tat. Regulates Tat's transactivating activity and may help inducing chromatin remodeling of proviral genes. Acetylates FOXO1 and enhances its transcriptional activity. Acetylates BCL6 which disrupts its ability to recruit histone deacetylases and hinders its transcriptional repressor activity. Participates in CLOCK or NPAS2-regulated rhythmic gene transcription; exhibits a circadian association with CLOCK or NPAS2, correlating with increase in PER1/2 mRNA and histone H3 acetylation on the PER1/2 promoter.

Wuchao Yuan, J. Biol. Chem., Apr 1996; 271: 9009.

E. Tory Manning, Mol. Cell. Biol., Jun 2001; 21: 3876 - 3887.

Jiwen Li, Mol. Cell. Biol., Mar 2000; 20: 2031 - 2042.

Gopalswamy Jayaraman, J. Biol. Chem., Jun 1999; 274: 17342.

Note: This product is for in vitro research use only