Datasheet for ABIN6972466

anti-p300 antibody

3 Images

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Overview

Quantity:	100 µg
Target:	p300 (EP300)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB), Immunoprecipitation (IP), Immunofluorescence (IF), Immunocytochemistry (ICC), Chromatin Immunoprecipitation (ChIP), ChIP DNA-Sequencing (ChIP-seq)

Product Details

Immunogen:	The antibody was raised against full-length p300 purified from human 293 cells.
Clone:	NM11
Isotype:	IgG1
Characteristics:	p300 (E1A binding protein p300) functions as a 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. Also functions as an 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. Can also mediate transcriptional repression. Binds to and may be involved in the

Product Details

	transforming capacity of the adenovirus E1A protein. p300 antibody (mAb) (Clone NM11) was raised in a Mouse host. It has been validated for use in Chromatin Immunoprecipitation, ChIP-Seq, Immunocytochemistry, Immunofluorescence, Immunoprecipitation and Western blot, it has been shown to react with Human samples.
Purification:	Protein A Chromatography

Target Details

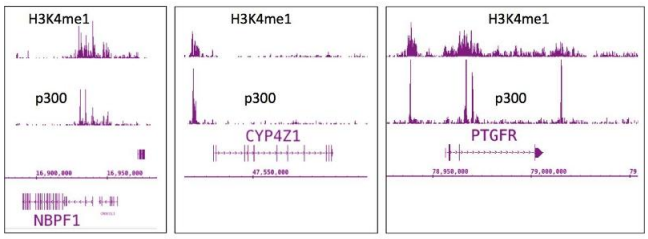
Target:	p300 (EP300)
Alternative Name:	p300 (EP300 Products)
Molecular Weight:	300 kDa
NCBI Accession:	NP_001420
Pathways:	p53 Signaling, Notch Signaling, Interferon-gamma Pathway, Intracellular Steroid Hormone Receptor Signaling Pathway, Regulation of Intracellular Steroid Hormone Receptor Signaling, Regulation of Lipid Metabolism by PPARalpha, Regulation of Muscle Cell Differentiation, Regulation of Cell Size

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

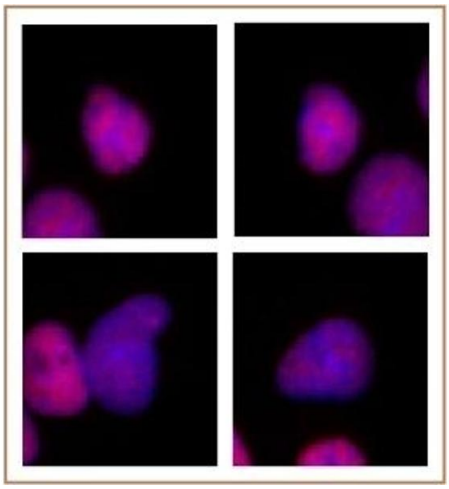
Handling

Buffer:	Purified IgG in PBS with 30 % glycerol and 0.035 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage.



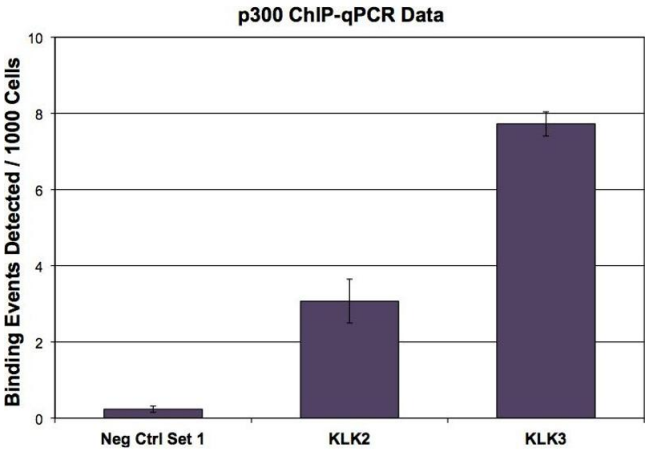
ChIP DNA-Sequencing

Image 1. p300 antibody (mAb) tested by ChIP-Seq. ChIP was performed using the ChIP-IT High Sensitivity Kit with chromatin from 4.5 million LNCaP cells and 5 µL of p300 antibody. ChIP DNA was sequenced on the Illumina HiSeq and 15 million sequence tags were mapped to identify p300 binding sites. p300 along with H3K4me1 are markers of active enhancer elements and are therefore expected to co-localize. A sampling of the p300 ChIP-Seq data shows the expected co-localization of p300 and H3K4me1.



Immunofluorescence

Image 2. p300 antibody (mAb) tested by immunofluorescence. Formaldehyde fixed HeLa cells stained with p300 antibody at a 0.5 µg/mL dilution.



Chromatin Immunoprecipitation

Image 3. p300 antibody (mAb) tested by ChIP. ChIP was performed using the ChIP-IT High Sensitivity Kit with chromatin from 4.5 million LNCaP cells and 4 µg of p300 antibody. ChIP DNA was used in qPCR with the negative control primer pair or gene-specific primer pairs as indicated. Data are presented as Binding Events Detected per 1000 Cells using Epigenetic Services normalization scheme which accounts for primer efficiency and the amount of chromatin used in the ChIP reaction.