p300 (Acetyl Lys1542) Rabbit pAb

CatalogNo: YK0067

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,ELISA

MW
- 300kD (Observed)

Isotype
- IgG

Storage

Storage*	-15°C to -25°C/1 year (Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Recommended Dilution Ratios

WB 1:500-1:2000
ELISA 1:10000
Not yet tested in other applications.

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	Synthesized acetyl-peptide derived from human p300 around the acetylation site of K1542.
Specificity	Acetyl-p300 (K1542) Polyclonal Antibody detects endogenous levels of p300 around the acetylation site of K1542 protein.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):VTkGD

Target Information

Gene name EP300

Protein Name Histone acetyltransferase p300

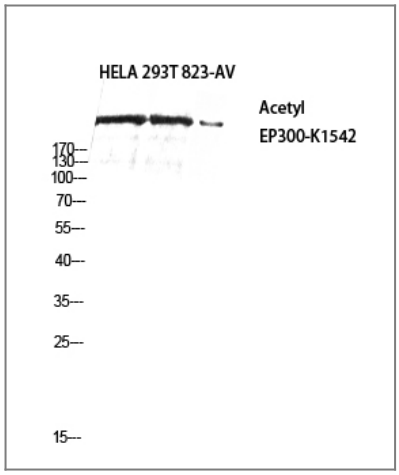
Organism	Gene ID	UniProt ID
Human	2033;	Q09472;
Mouse		B2RWS6;

Cellular Localization Cytoplasm . Nucleus . Chromosome . Localizes to active chromatin: Colocalizes with histone H3 acetylated and/or crotonylated at 'Lys-18' (H3K18ac and H3K18cr , respectively) (PubMed:25818647) . In the presence of ALX1 relocalizes from the cytoplasm to the nucleus. Colocalizes with ROCK2 in the nucleus (PubMed:12929931) . .

Tissue specificity Epithelium ,Skin ,

Function Catalytic activity:Acetyl-CoA + histone = CoA + acetylhistone. ,Disease:Chromosomal aberrations involving EP300 may be a cause of acute myeloid leukemias. Translocation t (8;22) (p11;q13) with MYST3. ,Disease:Defects in EP300 are a cause of Rubinstein-Taybi syndrome (RSTS) [MIM:180849]. RSTS is an autosomal dominant disorder characterized by craniofacial abnormalities , broad thumbs , broad big toes , mental retardation and a propensity for development of malignancies. ,Disease:Defects in EP300 may play a role in epithelial cancer. ,Function: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. Binds to and may be involved in the transforming capacity of the adenovirus E1A protein. Mediates cAMP-gene regulation by binding specifically to phosphorylated CREB 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. ,online information:P300/CBP entry ,PTM:Acetylated on Lys at up to 17 positions by intermolecular autocatalysis. ,PTM:Citrullinated at Arg-2142 by PADI4 , which impairs methylation by CARM1 and promotes interaction with NCOA2/GRIP1. ,PTM:Methylated at Arg-580 and Arg-604 in the KIX domain by CARM1 , which blocks association with CREB , inhibits CREB signaling and activates apoptotic response. Also methylated at Arg-2142 by CARM1 , which impairs interaction with NCOA2/GRIP1. ,PTM:Phosphorylated. ,similarity:Contains 1 bromo domain. ,similarity:Contains 1 KIX domain. ,similarity:Contains 1 ZZ-type zinc finger. ,similarity:Contains 2 TAZ-type zinc fingers. ,subunit:Interacts with phosphorylated CREB1 (By similarity) . Interacts with DTX1 , EID1 , ELF3 , FEN1 , LEF1 , NCOA1 , NCOA6 , NR3C1 , PCAF , PELP1 , PRDM6 , SPIB , SRY , TCF7L2 , TP53 , SRCAP , TTC5 , JMY and TRERF1. The TAZ-type 1 domain interacts with HIF1A. Probably part of a complex with HIF1A and CREBBP. Part of a complex containing CARM1 and NCOA2/GRIP1. Interacts with ING4 and this interaction may be indirect. Interacts with ING5. Interacts with the C-terminal region of CITED4. Interacts with HTLV-1 Tax and p30II. Interacts with and acetylates HIV-1 Tat. ,

Validation Data



Western blot analysis of HELA 293T 823-AV using Acetyl-p300 (K1542) antibody. Antibody was diluted at 1:2000. Secondary antibody (catalog#:RS0002) was diluted at 1:20000

Contact information

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Please scan the QR code to access additional product information: **p300 (Acetyl Lys1542) Rabbit pAb**

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