



## Rabbit Anti-KAT3A / CBP antibody

SL12395R

<b>Product Name:</b>	KAT3A / CBP
<b>Chinese Name:</b>	CREBBinding protein抗体
<b>Alias:</b>	CBP; CBP_HUMAN; CREB binding protein; CREB-binding protein; CREBBP; Cyclic AMP responsive enhancer binding protein; Cyclic AMP-responsive enhancer binding protein; KAT3A; RSTS; RTS; Rubinstein Taybi syndrome; Rubinstein-Taybi syndrome.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Sheep,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	265kDa
<b>Cellular localization:</b>	The nucleuscytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human KAT3A/CBP:301-400/2442
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Cyclic AMP-regulated gene expression frequently involves a DNA element designated the cAMP-regulated enhancer (CRE). Many transcription factors bind to this element, including the protein CREB, which is activated as a result of phosphorylation by protein kinase A. It has been shown that protein kinase A-mediated CREB phosphorylation results in its binding to a nuclear protein designated CBP (for CREB-binding protein).

These findings suggest that CBP has many of the properties expected of a CREB co-activator. Another high molecular weight transcriptional adapter protein, designated p300, is characterized by three cysteine- and histidine-rich regions, of which the most carboxy terminal region specifically binds the adenovirus E1A protein. p300 molecules lacking an intact E1A binding site bypass E1A repression, even in the presence of high concentrations of E1A. Sequence analysis of CBP and p300 has revealed substantial homology, arguing that these proteins are members of a conserved family of co-activators.

**Function:**

Acetylates histones, giving a specific tag for transcriptional activation. Also acetylates non-histone proteins, like NCOA3 coactivator. Binds specifically to phosphorylated CREB and enhances its transcriptional activity toward cAMP-responsive genes. Acts as a coactivator of ALX1 in the presence of EP300.

**Subunit:**

Found in a complex containing NCOA2; NCOA3; IKKA; IKKB and IKBKG. Probably part of a complex with HIF1A and EP300. Interacts with GATA1; the interaction results in acetylation and enhancement of transcriptional activity of GATA1. Interacts with MAF AND ZCCHC12. Interacts with DAXX; the interaction is dependent on CBP sumoylation and results in suppression of the transcriptional activity via recruitment of HDAC2 to DAXX (By similarity). Interacts with phosphorylated CREB1. Interacts with CITED4 (C-terminal region). Interacts (via the TAZ-type 1 domain) with HIF1A. Interacts with SRCAP, CARM1, ELF3, MLLT7/FOXO4, N4BP2, NCOA1, NCOA3, NCOA6, PCAF, DDX5, DDX17, PELP1, PML, SMAD1, SMAD2, SMAD3, SPIB and TRERF1. Interacts with HTLV-1 Tax and p30II. Interacts with HIV-1 Tat. Interacts with KLF1; the interaction results in acetylation of KLF1 and enhancement of its transcriptional activity. Interacts with MTDH. Interacts with NFATC4. Interacts with MAFG; the interaction acetylates MAFG in the basic region and stimulates NFE2 transcriptional activity through increasing its DNA-binding activity. Interacts with IRF2; the interaction acetylates IRF2 and regulates its activity on the H4 promoter. Interacts (via N-terminus) with SS18L1/CREST (via C-terminus). Interacts with MECOM. Interacts with CITED1 (via C-terminus). Interacts with FOXO1; the interaction acetylates FOXO1 and inhibits its transcriptional activity.

**Subcellular Location:**

Cytoplasm. Nucleus. Recruited to nuclear bodies by SS18L1/CREST. In the presence of ALX1 relocalizes from the cytoplasm to the nucleus.

**Post-translational modifications:**

Methylation of the KIX domain by CARM1 blocks association with CREB. This results in the blockade of CREB signaling, and in activation of apoptotic response. Phosphorylated upon DNA damage, probably by ATM or ATR. Sumoylation negatively regulates transcriptional activity via the recruitment of DAXX.

**DISEASE:**

Note=Chromosomal aberrations involving CREBBP may be a cause of acute myeloid leukemias. Translocation t(8;16)(p11;p13) with MYST3/MOZ; translocation t(11;16)(q23;p13.3) with MLL/HRX; translocation t(10;16)(q22;p13) with MYST4/MORF.

MYST3-CREBBP may induce leukemia by inhibiting RUNX1-mediated transcription. Defects in CREBBP are a cause of Rubinstein-Taybi syndrome type 1 (RSTS1) [MIM:180849]. RSTS1 is an autosomal dominant disorder characterized by craniofacial abnormalities, broad thumbs, broad big toes, mental retardation and a propensity for development of malignancies.

**Similarity:**

Contains 1 bromo domain.

Contains 1 KIX domain.

Contains 2 TAZ-type zinc fingers.

Contains 1 ZZ-type zinc finger.

**SWISS:**

Q92793

**Gene ID:**

1387

**Database links:**

[Entrez Gene: 1387](#) Human

[Entrez Gene: 12914](#) Mouse

[Entrez Gene: 54244](#) Rat

[Omim: 600140](#) Human

[SwissProt: Q92793](#) Human

[SwissProt: P45481](#) Mouse

[SwissProt: Q6JHU9](#) Rat

[Unigene: 459759](#) Human

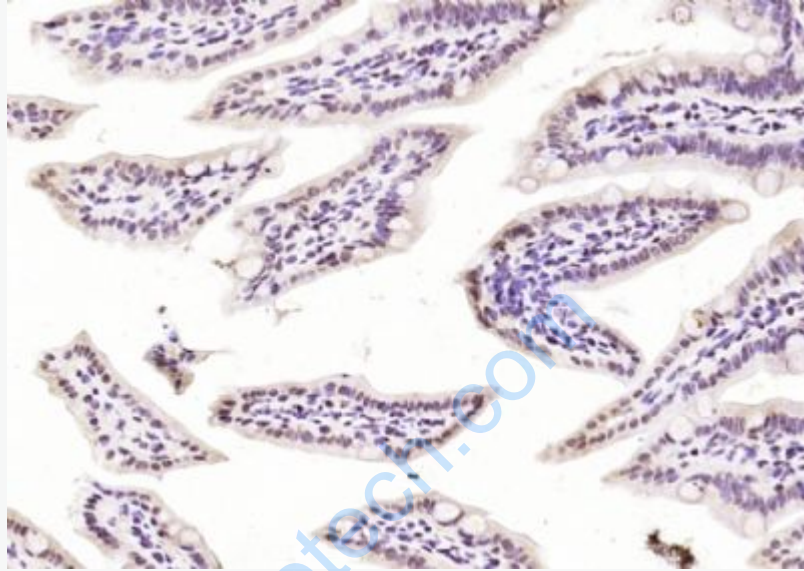
[Unigene: 132238](#) Mouse

[Unigene: 392384](#) Mouse

[Unigene: 12815](#) Rat

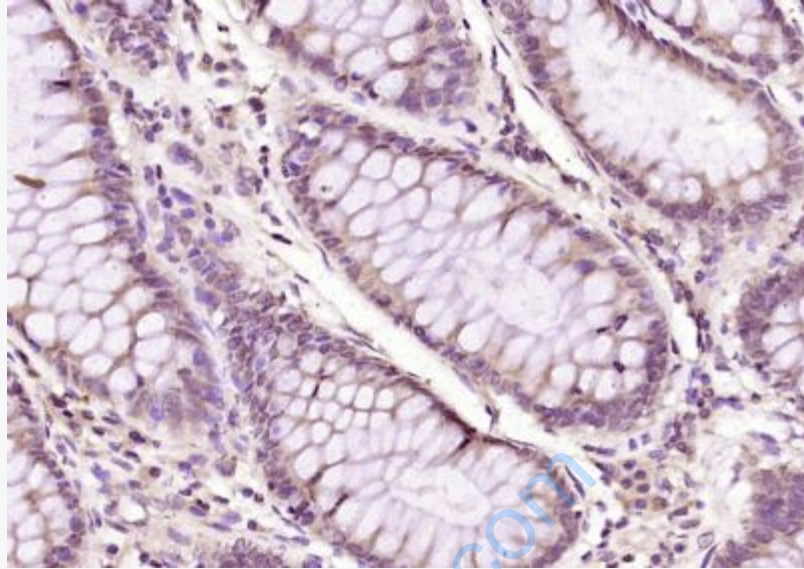
**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



**Picture:**

Paraformaldehyde-fixed, paraffin embedded (mouse intestine); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (KAT3A CBP) Polyclonal Antibody, Unconjugated (SL12395R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (KAT3A CBP) Polyclonal Antibody, Unconjugated (SL12395R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.