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# CREB-1 (ANT0016R) Rabbit mAb

CatalogNo: ANT8342 Recombinant R

Formulation: PBS,50%glycerol,0.05%Proclin 300,0.05%BSA

Quantity: 100 ug/vial

Host Species Reactivity Applications

Rabbit
 Human, Mouse, Rat,
 WB, IHC, IF, IP, ELISA

MW Isotype

• 37kD (Calculated) • IgG,Kappa

43kD (Observed)

#### Recommended Dilution Ratios

IHC 1:2000-1:10000 WB 1:2000-1:10000 IF 1:200-1:1000

ELISA 1:5000-1:20000

IP 1:50-1:200

## Storage

Storage\* -15°C to -25°C/1 year(Do not lower than -25°C)

#### **Basic Information**

**Clonality** Monoclonal

Clone Number ANT0016R

## Target Information

### Immunogen Information Specificity

#### Endogenous

Gene name CREB1

**Protein Name** Cyclic AMP-responsive element-binding protein 1

Organism	Gene ID	UniProt ID
Human	<u>1385</u> ;	<u>P16220</u> ;
Mouse	<u>12912</u> ;	<u>Q01147</u> ;
Rat	<u>81646</u> ;	<u>P15337</u> ;

**Cellular** Nucleus

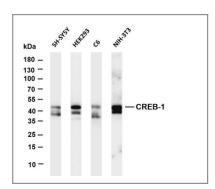
Localization

Tissue specificity Eye, Placenta, Spleen, Testis,

#### **Function**

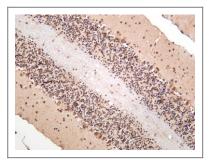
Disease:A chromosomal aberration involving CREB1 is associated with angiomatoid fibrous histiocytoma (AFH) [MIM:612160]. Translocation t(2;22)(q33;q12) with CREB1 generates a EWSR1/CREB1 fusion gene that is most common genetic abnormality in this tumor type., Function:This protein binds the cAMP response element (CRE), a sequence present in many viral and cellular promoters. CREB stimulates transcription on binding to the CRE. Transciption activation is enhanced by the TORC coactivators which act independently of Ser-133 phosphorylation. Implicated in synchronization of circadian rhythmicity., ANTM:Stimulated by phosphorylation. Phosphorylation of both Ser-133 and Ser-142 in the SCN regulates the activity of CREB and participates in circadian rhythm generation. Phosphorylation of Ser-133 allows CREBBP binding (By similarity). Phosphorylated upon DNA damage, probably by ATM or ATR., similarity:Belongs to the bZIP family., similarity:Contains 1 bZIP domain., similarity:Contains 1 KID (kinase-inducible) domain., subunit:Interacts with PPRC1. Binds DNA as a dimer. This dimer is stabilized by magnesium ions. Interacts, through the bZIP domain, with the coactivators TORC1/CRTC1, TORC2/CRTC2 and TORC3/CRTC3. When phosphorylated on Ser-133, binds CREBBP.,

# **Validation Data**

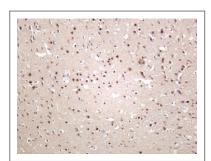


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-CREB-1 (ANT0016R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: SH-SY5Y Lane 2: HEK293 Lane 3: C6 Lane 4: NIH-3T3

Predicted band size: 37kDa Observed band size: 43kDa



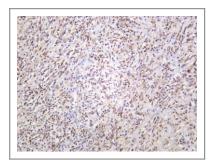
Mouse brain was stained with anti-CREB (ANTO016R) rabbit antibody



Rat brain was stained with anti-CREB (ANT0016R) rabbit antibody



Human brain was stained with anti-CREB (ANT0016R) rabbit antibody



Human thyroid carcinoma was stained with anti-CREB (ANT0016R) rabbit antibody

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