

## CREB1 (PTR2317) mouse mAb

Catalog No: YM3428

**Reactivity:** Human; Mouse; Rat;

**Applications:** WB;IF;ELISA

Target: CREB-1

**Fields:** >>cGMP-PKG signaling pathway;>>cAMP signaling pathway;>>PI3K-Akt

signaling pathway;>>AMPK signaling pathway;>>Longevity regulating pathway;>>Adrenergic signaling in cardiomyocytes;>>Osteoclast differentiation;>>Antigen processing and presentation;>>TNF signaling

pathway;>>Circadian rhythm;>>Circadian

entrainment;>>Thermogenesis;>>Cholinergic synapse;>>Dopaminergic

synapse;>>Insulin secretion;>>Estrogen signaling

pathway;>>Melanogenesis;>>Thyroid hormone synthesis;>>Glucagon signaling pathway;>>Renin secretion;>>Aldosterone synthesis and secretion;>>Relaxin signaling pathway;>>Cortisol synthesis and secretion;>>Parathyroid hormone

synthesis, secretion and action;>>Insulin resistance;>>Cushing

syndrome;>>Growth hormone synthesis, secretion and action;>>Vasopressin-regulated water reabsorption;>>Huntington disease;>>Prion disease;>>Cocaine addiction;>>Amphetamine addiction;>>Alcoholism;>>Tuberculosis;>>Hepatitis

B;>>Human cytomegalovirus infection;>>Human papillomavirus

infection;>>Human

Gene Name: CREB1

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

Human Gene Id: 1385

**Human Swiss Prot** 

P16220

No:

Mouse Swiss Prot

Q01147

No:

Immunogen: Recombinant Protein of human CREB-1 AA range: 100-200

**Specificity:** This antibody detects endogenous levels of CREB1 protein.

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



**Source:** Mouse, Monoclonal/IgG1, kappa

**Dilution :** WB 1:500-2000. IF 1:100-500. ELISA 1:1000-5000

Purification: Protein G

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

Molecularweight: 36kD

Observed Band: 45kD

**Cell Pathway:** Antigen processing and presentation; Melanogenesis; Huntington's

disease; Prostate cancer;

**Background:** This gene encodes a transcription factor that is a member of the leucine zipper

family of DNA binding proteins. This protein binds as a homodimer to the cAMP-responsive element, an octameric palindrome. The protein is phosphorylated by several protein kinases, and induces transcription of genes in response to hormonal stimulation of the cAMP pathway. Alternate splicing of this gene results

in several transcript variants encoding different isoforms. [provided by RefSeq,

Mar 2016],

**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., PTM: Stimulated by phosphorylation. Phosphorylation of both Ser-133

and Ser-142 in the SCN regulates the activity of CREB and participates in

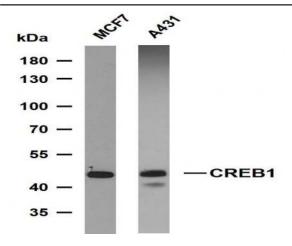
circadian rhythm generation. Phosphorylation of Ser-133 allows CREBBP binding

(By similarity). Phosphorylated upon DNA damage, probably by ATM or

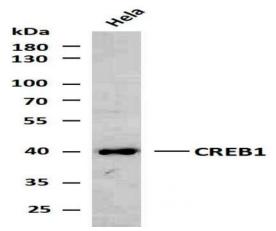
ATR.,similarit

**Expression :** Eye, Placenta, Spleen, Testis,

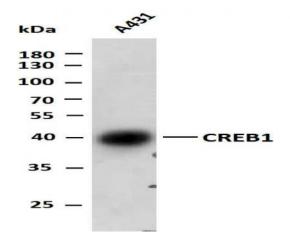
## **Products Images**



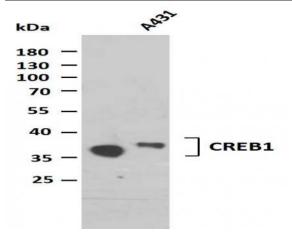
Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-CREB1(PTR2317) antibody. The HRP-conjugated Goat anti-Mouse IgG(H+L) antibody was used to detect the antibody. Lane 1: MCF7 Lane 2: A431



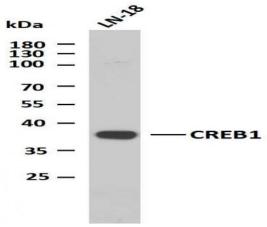
Whole cell lysates of Hela were separated by 10% SDS-PAGE, and the membrane was blotted with anti-CREB1 antibody. The HRP-conjugated Goat anti-Mouse IgG(H+L) antibody was used to detect the antibody. Lane 1: Hela



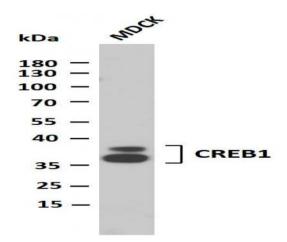
Whole cell lysates of A431 were separated by 10% SDS-PAGE, and the membrane was blotted with anti-CREB1 antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: A431



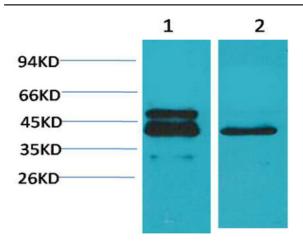
Various cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-CREB1 antibody. The HRP-conjugated Goat anti-Mouse IgG(H+L) antibody was used to detect the antibody. Lane 1: HEK293 Lane 1: A431



Whole cell lysates of LN-18 were separated by 10% SDS-PAGE, and the membrane was blotted with anti-CREB1 antibody. The HRP-conjugated Goat anti-Mouse IgG(H+L) antibody was used to detect the antibody. Lane 1: LN-18



Whole cell lysates of MDCK were separated by 10% SDS-PAGE, and the membrane was blotted with anti-CREB1 antibody. The HRP-conjugated Goat anti-Mouse IgG(H+L) antibody was used to detect the antibody. Lane 1: MDCK



Western blot analysis of 1) A431, 2) 3T3 using CREB-1 Monoclonal Antibody.