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CREB1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1551a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	P16220
Reactivity	Human, Mouse, Rat, Monkey
Host	Mouse
Clonality	Monoclonal
Clone Names	5G3
Isotype	IgG1
Calculated MW	35136
Description	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 two transcript variants encoding different isoforms. (provided by RefSeq)
Immunogen	Purified recombinant fragment of human CREB1 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	1385
Other Names	Cyclic AMP-responsive element-binding protein 1, CREB-1, cAMP-responsive element-binding protein 1, CREB1
Dilution	WB~~1/500 - 1/2000 IHC~~1/500 - 1/2000 ICC~~N/A E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CREB1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CREB1

Function	Phosphorylation-dependent transcription factor that stimulates transcription upon binding to the DNA cAMP response element (CRE), a sequence present in many viral and cellular promoters (By similarity). Transcription activation is enhanced by the TORC coactivators which act independently of Ser-119 phosphorylation (PubMed:14536081). Involved in different cellular processes including the synchronization of circadian rhythmicity and the differentiation of adipose cells (By similarity). Regulates the expression of apoptotic and inflammatory response factors in cardiomyocytes in response to ERFE-mediated activation of AKT signaling (By similarity).
Cellular Location	Nucleus {ECO:0000255|PROSITE-ProRule:PRU00312, ECO:0000255|PROSITE-ProRule:PRU00978, ECO:0000269|PubMed:12552083}

References

1. Proc Natl Acad Sci U S A. 2008 Jul 22;105(29):10161-6. 2. FEBS Lett. 2008 Jun 11;582(13):1889-93.3 3. Am J Med Genet B Neuropsychiatr Genet. 2008 Jun 5;147B(4):500-4.

Images

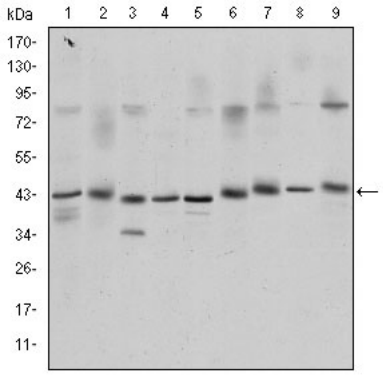

Figure 1: Western blot analysis using CREB1 mouse mAb against K562 (1), Jurkat (2), L1210 (3), HEK293 (4), A431 (5), Hela (6), Cos7 (7), PC-12 (8), and NIH/3T3 (9) cell lysate.

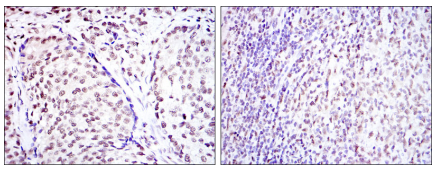

Figure 2: Immunohistochemical analysis of paraffin-embedded prostate cancer tissues (left) and submaxillary tumor tissues (right) using CREB1 mouse mAb with DAB staining.

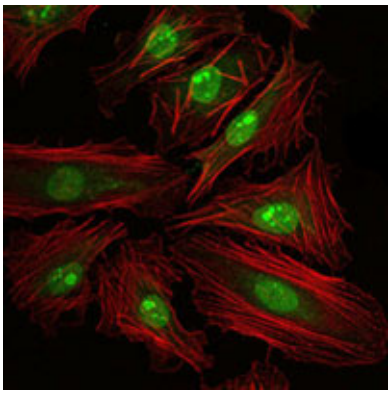

Figure 3: Immunofluorescence analysis of Hela cells using CREB1 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.