

Mouse CREB Monoclonal Antibody | anti-CREB antibody

CREB (Ser-133), phospho-specific Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71596	Mouse	Human, Rat, Mouse, Chicken	Immunocytochemistry, ELISA, Western Blot

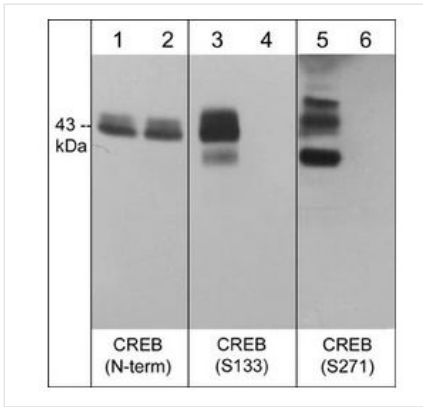
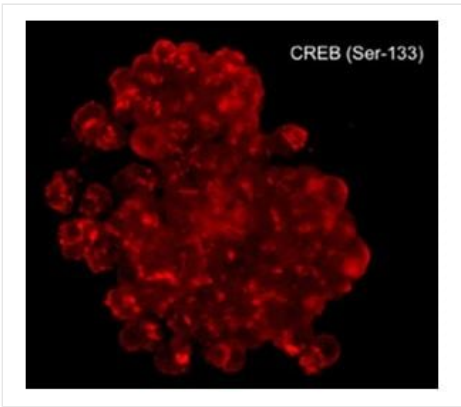
PRODUCT SYNONYMS

CREB; Monoclonal Antibody; CREB (Ser-133); phospho-specific Antibody; phospho-specific; CREB Ser133; anti-CREB antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Rat, Mouse, Chicken
Clonality	Monoclonal
Isotype	IgG1
Clone Number	M415
Specificity	The antibody detects a 43kDa* protein corresponding to the molecular mass of CREB on SDS-PAGE immunoblots of human A431, Jurkat, and rat PC12 cells treated with Calyculin A, as well as A431 treated with EGF and PC12 treated with NGF or Forskolin. This reactivity is not observed after lambda phosphatase treatment.
Purity/Purification	Protein A chromatography
Form/Format	Mouse monoclonal antibody purified with protein A chromatography is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-CREB antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Clone M415 was generated from phospho-CREB (Ser-133) synthetic peptide (coupled to carrier protein) corresponding to amino acids surrounding Ser-133 in human CREB. This sequence is well conserved in rat, mouse, chicken, and zebrafish CREB. The site is also conserved in CREM (Ser-136) and ATF1 (Ser-63).
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)
Immunocytochemical labeling of phosphorylated CREB in calyculin A-treated A431 cells. The cells were fixed in paraformaldehyde and permeabilized using NP-40 before labeling with mouse monoclonal CREB (Ser-133). The antibody was detected using goat anti-mouse DyLight 594.

WB (Western Blot)
Western blot analysis of human A431 cells treated with calyculin A (100nM) for 30 min. (lanes 1, 3 & 5) then the blots were treated with lambda phosphatase (lanes 2, 4 & 6). The blots were probed with anti-CREB (N-terminal region) (lanes 1 & 2), anti-CREB (Ser-133) (lanes 3 & 4), and anti-CREB (Ser-271) (lanes 5 & 6).

ADDITIONAL INFORMATION

Related Product Information for anti-CREB antibody	CREB (cyclic AMP response element-binding protein) is a stimulus-induced transcription factor that plays pivotal roles in cell survival and proliferation. CREB is expressed in various tissues, and has important gene-regulating roles in the nervous system. The transactivation function of CREB is primarily regulated through Ser-133 phosphorylation by cAMP-dependent protein kinase A (PKA) and related kinases. CREB is phosphorylated at other sites in response to calcium influx and DNA damage. The DNA-damage responsive nuclear kinase, HIPK2, can phosphorylate Ser-271 but not Ser-133 in CREB, and this phosphorylation activates CREB transactivation function. Mutation of Ser-271 to Glu-271 potentiates the CREB transactivation function. Thus, phosphorylation of Ser-271 may be the mode of activation for CREB-dependent transcription in response to genotoxic stress.
References	Sakamoto, K. et al. (2010) Mol. Biol. Cell 21:2966. Lonze, B.E. & Ginty, D.D. (2002) Neuron 35:605. Gonzalez, G.A. & Montminy, M.R. (1989) Cell. 59(4):675.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4758054
NCBI GeneID	1385
NCBI Accession #	NP_004370.1
NCBI GenBank Nucleotide #	NM_004379.3
UniProt Accession #	P16220; P21934; Q6V963; Q9UMA7
Molecular Weight	36,688 Da
NCBI Official Full Name	cyclic AMP-responsive element-binding protein 1 isoform A
NCBI Official Synonym Full Names	cAMP responsive element binding protein 1
NCBI Official Symbol	CREB1
NCBI Official Synonym Symbols	CREB
NCBI Protein Information	cyclic AMP-responsive element-binding protein 1; CREB-1; transactivator protein; active transcription factor CREB; cAMP-response element-binding protein-1; cAMP-responsive element-binding protein 1
UniProt Protein Name	Cyclic AMP-responsive element-binding protein 1
UniProt Gene Name	CREB1

UniProt Synonym Gene Names	CREB-1
UniProt Entry Name	CREB1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/creb-antibody-clone-m415-immunocytochemistry-western-blot-elisa/71596>