

Product datasheet for **TA389107**

Phospho-CREB1 Mouse Antibody [Clone ID: M415]

Product data:

| | |
|-------------------------|---|
| Product Type: | Primary Antibodies |
| Clone Name: | M415 |
| Applications: | ICC, WB |
| Recommended Dilution: | WB: 1:1000 ICC: 1:100 |
| Reactivity: | Human, Rat, Mouse, Chicken |
| Host: | Mouse |
| Isotype: | IgG1 |
| 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). |
| Specificity: | The antibody detects a 43 kDa* 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. |
| Formulation: | PBS + 1 mg/ml BSA, 0.05% NaN ₃ and 50% glycerol |
| Concentration: | lot specific |
| Purification: | Protein A Purified |
| Conjugation: | Unconjugated |
| Storage: | Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C. |
| Stability: | After date of receipt, stable for at least 1 year at -20°C. |
| Predicted Protein Size: | 43 |
| Database Link: | P16220 |



[View online »](#)

Background:

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.

Note:

Protein G purified tissue culture supernatant.