NEUROMICS /



Data Sheet CREB

MO18006 Host: Catalog Number: Mouse

Protein G purified IgG1 **Product Type:** Species Reactivity: Human; Rat; Mouse; Primate

Liquid in 10 mM sodium HEPES (pH 7.5), **Immunogen** GST-CREB full length fusion Format: protein.

150 mM NaCl, 100 μg/ml BSA, 50% glycerol and less than 0.02% sodium

azide.

Western Blotting-1:1000 **Applications**

Immunofluorescence-1:800 (Frozen)

Flow Cytometry-1:100

Dilutions listed as a recommendation. Optimal dilution should be determined by investigator.

Storage: Antibody can be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six

months without detectable loss of activity. The antibody can be stored at 2° - 8° C for 1 month without

detectable loss of activity. Avoid repeated freeze-thaw cycles.

Application Notes

Specificity

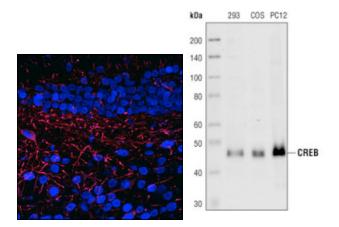
CREB Mouse mAb detects endogenous levels of total CREB protein.

Description/Data:

Sequence:

CREB is a bZIP transcription factor that activates target genes through cAMP response elements. CREB is able to mediate signals from numerous physiological stimuli, resulting in regulation of a broad array of cellular responses. While CREB is expressed in numerous tissues, it plays a large regulatory role in the nervous system. CREB is believed to play a key role in promoting neuronal survival, precursor proliferation, neurite outgrowth and neuronal differentiation in certain neuronal populations. CREB promotes outgrowth and differentiation as a mediator of Neurotrophin pathways. Additionally, CREB signaling is involved in learning and memory in several organisms. CREB is able to selectively activate numerous downstream genes through interactions with different dimerization partners. CREB is activated by phosphorylation at Ser133 by various signaling pathways including Erk, Ca2+ and stress signaling. Some of the kinases involved in phosphorylating CREB at Ser133 are p90RSK, MSK, CaMKIV and MAPKAPK.

Images: Confocal immunofluorescent analysis of mouse dentate gyrus stained with Tau (red) and CREB (blue) and western blot analysis of extracts from 293, COS and PC12 cells, using CREB.



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