

Anti-CREB (Ser-133), Phosphospecific Antibody

Catalog # AN1724

Product Information

Application WB, ICC
Primary Accession P16220
Host Mouse

Clonality Mouse Monoclonal

IsotypeIgG1Clone NamesM415Calculated MW35136

Additional Information

Gene ID 1385

Other Names Cyclic AMP, CREB

Target/Specificity 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.

Dilution WB~~1:1000 ICC~~N/A

Format Protein A Purified

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 Anti-CREB (Ser-133), Phosphospecific Antibody is for research use only and

not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

Background

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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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.