



Product datasheet

APC Anti-CREB (phospho S133) antibody [CREBS133-4D11] ab278703

Recombinant

2 Images

Overview

Product name	APC Anti-CREB (phospho S133) antibody [CREBS133-4D11]
Description	APC Rabbit monoclonal [CREBS133-4D11] to CREB (phospho S133)
Host species	Rabbit
Conjugation	APC. Ex: 645nm, Em: 660nm
Tested applications	Suitable for: Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	<p>Synthetic peptide within Human CREB (phospho S133). The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please contact our Scientific Support team to discuss your requirements.</p> <p>Database link: P16220</p> <p> Run BLAST with  Run BLAST with</p>
Positive control	Flow cyt: SK-N-MC cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Store In the Dark.
Storage buffer	Preservative: 0.09% Sodium azide Constituents: 99.71% PBS, 0.2% BSA
Purity	Protein A/G purified
Clonality	Monoclonal

Clone number	CREBS133-4D11
Isotype	IgG
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab278703 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use 5µl for 10 ⁶ cells.

Target

Function This protein binds the cAMP response element (CRE), a sequence present in many viral and cellular promoters. CREB stimulates transcription on binding to the CRE. Transcription activation is enhanced by the TORC coactivators which act independently of Ser-133 phosphorylation. Implicated in synchronization of circadian rhythmicity.

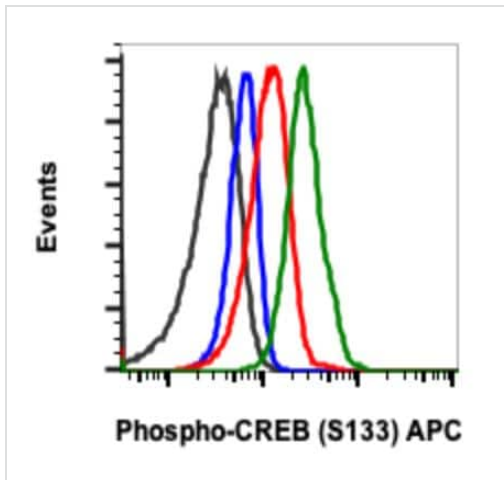
Involvement in disease Defects in CREB1 may be a cause of angiomatoid fibrous histiocytoma (AFH) [MIM:612160]. A distinct variant of malignant fibrous histiocytoma that typically occurs in children and adolescents and is manifest by nodular subcutaneous growth. Characteristic microscopic features include lobulated sheets of histiocyte-like cells intimately associated with areas of hemorrhage and cystic pseudovascular spaces, as well as a striking cuffing of inflammatory cells, mimicking a lymph node metastasis. Note=A chromosomal aberration involving CREB1 is found in a patient with angiomatoid fibrous histiocytoma. Translocation t(2;22)(q33;q12) with CREB1 generates a EWSR1/CREB1 fusion gene that is most common genetic abnormality in this tumor type.

Sequence similarities Belongs to the bZIP family.
Contains 1 bZIP domain.
Contains 1 KID (kinase-inducible) domain.

Post-translational modifications Stimulated by phosphorylation. Phosphorylation of both Ser-133 and Ser-142 in the SCN regulates the activity of CREB and participates in circadian rhythm generation. Phosphorylation of Ser-133 allows CREBBP binding (By similarity). Phosphorylated upon DNA damage, probably by ATM or ATR.
Sumoylated by SUMO1. Sumoylation on Lys-304, but not on Lys-285, is required for nuclear localization of this protein. Sumoylation is enhanced under hypoxia, promoting nuclear localization and stabilization.

Cellular localization Nucleus.





Images



Flow cytometric analysis of SK-N-MC cells untreated (red) or treated with forskolin (green) using ab278703, or concentration-matched Rabbit (G9) mAb IgG Isotype Control (APC Conjugate) for cells untreated (black) or treated with forskolin (blue). Flow cytometric analysis of SK-N-MC cells secondary antibody only negative control (blue) or untreated (red) or treated with Forskolin (green) using ab278703.

Flow Cytometry - APC Anti-CREB (phospho S133) antibody [CREBS133-4D11] (ab278703)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

APC Anti-CREB (phospho S133) antibody [CREBS133-4D11] (ab278703)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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