abcam

ab277098

Anti-CREB5 antibody [PCRP-CREB5-1G8]

Key facts

Isotype	IgG2b
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS, 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Full Length Protein corresponding to Human CREB5. Database link Q02930
Clone number	PCRP-CREB5-1G8
Purification technique	Affinity purification Protein A/G
Light chain type	kappa
Concentration	0.2 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from bioreactor concentrate

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	1-2 µg/mL

Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1-2 µg for 10^6 Cells
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1-2 µg/mL
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Protein Array

Tested

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information CREB5

Function	Binds to the cAMP response element and activates transcription.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	CREB5 also known as cAMP responsive element binding protein 5 is a transcription factor important for regulating gene expression. This protein has a mass of approximately 57 kDa and belongs to the CREB family of proteins. It is found expressed in various tissues including the brain lung and kidney. CREB5 binds to the cAMP response element (CRE) sequence found in the promoters of certain genes to modulate their transcription.
Biological function summary	CREB5 plays a role in the response to cellular stress and adaptation. It participates in mediating cellular responses through transcriptional activation influenced by signals such as hormones growth factors and neurotransmitters. CREB5 forms complexes with other transcription factors and coactivators enhancing or repressing the transcription of target genes depending on the context. It influences processes such as differentiation proliferation and survival of cells.
Pathways	CREB5 is involved in the cAMP signaling pathways and MAPK/ERK pathways. These pathways regulate various cellular functions including metabolism cell cycle progression and synaptic plasticity. CREB5 interacts with proteins like CREB1 and CREB3 which together contribute to the dysregulation of these pathways when mutations or malfunctions occur.

Associated diseases and disorders	CREB5 has been associated with neurodegenerative disorders like Alzheimer's disease and certain types of cancer such as lung cancer. Variants in the expression or function of CREB5 can markedly affect the disease process often interacting with proteins like ATF4 in Alzheimer's which is implicated in stress responses and with NF-kB in cancer involved in immune response and cell survival mechanisms. Understanding CREB5's role provides insights into therapeutic targets for these conditions.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

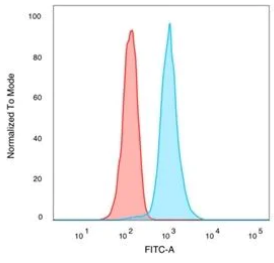
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

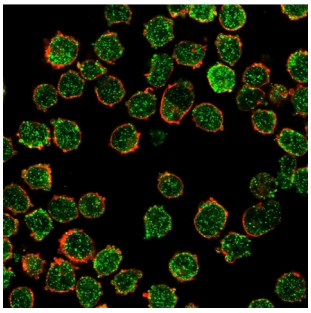
5 product images



Flow Cytometry - Anti-CREB5 antibody [PCRP-CREB5-1G8] (ab277098)

CREB5 Flow Cytometry staining using mouse Anti-CREB5 antibody

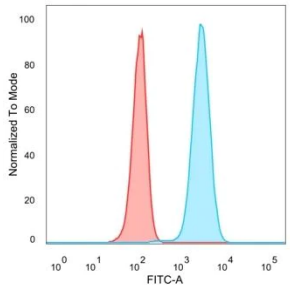
Flow cytometry analysis of PFA-fixed K562 (human chronic myelogenous leukemia cell line from bone marrow) cells labeling CREB5 using ab277098 at 2 µg / 10^6 cells followed by goat anti-mouse IgG-CF488 (blue); unstained cells (red).



Immunocytochemistry/ Immunofluorescence - Anti-CREB5 antibody [PCRP-CREB5-1G8] (ab277098)

CREB5 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-CREB5 antibody

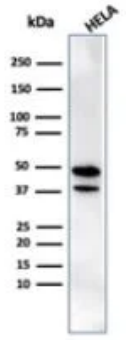
Immunofluorescence analysis of PFA-fixed K562 (human chronic myelogenous leukemia cell line from bone marrow) cells labeling CREB5 with ab277098 at 2 µg/ml, followed by goat anti-mouse IgG-CF488 (green); phalloidin counterstain (red).



Flow Cytometry - Anti-CREB5 antibody [PCRP-CREB5-1G8] (ab277098)

CREB5 Flow Cytometry staining using mouse Anti-CREB5 antibody

Flow cytometry analysis of PFA-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells labeling CREB5 using ab277098 at 2 µg / 10^6 cells followed by goat anti-mouse IgG-CF488 (blue); unstained cells (red).

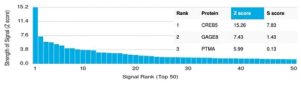


Western blot - Anti-CREB5 antibody [PCRP-CREB5-1G8] (ab277098)

All lanes:
Western blot - Anti-CREB5 antibody [PCRP-CREB5-1G8] (ab277098) at 2 µg/mL

All lanes:
HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate

Predicted band size: 56 kDa



Protein Array - Anti-CREB5 antibody [PCRP-CREB5-1G8] (ab277098)

Analysis of Protein Array containing more than 19,000 full-length human proteins using ab277098. Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

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