abcam

ab233797

Anti-ATF3 antibody [5A9B9]

Mouse Monoclonal ATF3 antibody. Suitable for Flow Cyt, WB and reacts with Human samples. Cited in 1 publication. Immunogen corresponding to Recombinant Full Length Protein corresponding to Human ATF3.

Image updates are in progress. Products remain available and covered by the Abcam Product Promise. Learn more.

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Full Length Protein corresponding to Human ATF3. Database link P18847
Clone number	5A9B9
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from tissue culture supernatant.

Reactivity data

Flow Cyt

Tested

Species	Human

Dilution info	1/200 - 1/400
Notes	-

Predicted

Species	Mouse, Rat, Cow
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/100 - 1/500
Notes	-

Predicted

Species	Mouse, Rat, Cow
Dilution info	-
Notes	-

Target data

See full target information ATF3

Function	This protein binds the cAMP response element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular promoters. Represses transcription from promoters with ATF sites. It may repress transcription by stabilizing the binding of inhibitory cofactors at the promoter. Isoform 2. Activates transcription presumably by sequestering inhibitory cofactors away from the promoters. Isoform 3. Stress-induced isoform, counteracts the transcriptional repression of isoform 1.

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	ATF3 also known as Activating Transcription Factor 3 functions primarily as a stress-responsive transcription factor. This protein has a molecular weight of about 21 kDa and is part of the ATF/CREB family of transcription factors. ATF3 is expressed in various tissues and is known for its role in stress response and regulation of gene expression. The expression levels change in response to cellular stress and it may interact with several other transcription factors to modulate gene expression profiles.
Biological function summary	ATF3 acts as a regulator of cellular stress responses and can influence cell cycle arrest and apoptosis. It does not form a large complex but interacts with diverse partners to execute its functions. Studies often use HCT116 cells to investigate ATF3's role where it can serve as a marker of cellular stress and inflammation. The protein regulates genes involved in maintaining homeostasis in stressed cells.
Pathways	ATF3 is involved in stress response and apoptotic pathways. In the context of apoptosis ATF3 interacts with proteins like p53 and Jun which are important for inducing cell cycle arrest and programmed cell death. In stress response pathways ATF3 modifies transcriptional activity in reaction to various stress signals providing a checkpoint for damaged cells before repairing or entering programmed death.
Associated diseases and disorders	ATF3 relates to cancer and cardiovascular diseases. In cancer abnormal expression of ATF3 can influence tumor growth and metastasis often acting through its interactions with proteins like NF-kB. Additionally in cardiovascular disorders ATF3's role in regulating stress responses underpins its involvement in conditions linked to inflammation and atherosclerosis again with NF-kB signaling being a relevant pathway of interaction. Researchers continue to study ATF3 to uncover therapeutic targets for these and other diseases.

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

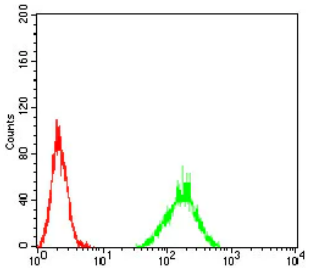
We do not recommend this combination. It is not covered by our product promise.

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.

1 product image



Flow Cytometry - Anti-ATF3 antibody [5A9B9] (ab233797)

ATF3 Flow Cytometry staining using mouse Anti-ATF3 antibody

Flow cytometric analysis of A549 (human lung carcinoma cell line) cells labeling ATF3 using ab233797 at 1/200 dilution (green) compared with a negative control (red).

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