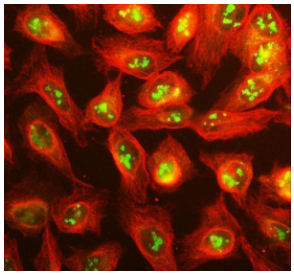
ATF1 Antibody / CREB Family Transcription Factor Antibody (R31551)

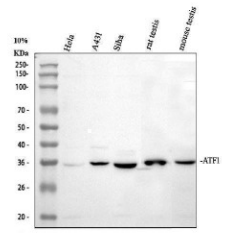
Catalog No.	Formulation	Size
R31551	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

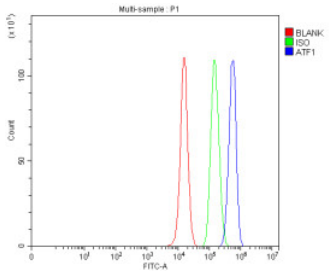
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P18846
Gene ID	466
Localization	Nuclear
Applications	Western blot: 0.5-1ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells
Limitations	This ATF1 Antibody / CREB Family Transcription Factor Antibody is available for research use only.



ATF1 Antibody U2OS Cell IF. Immunofluorescence analysis of ATF1 Antibody / CREB Family Transcription Factor Antibody in U2OS cells following enzyme antigen retrieval. ATF1 was detected with a Fluoro488-conjugated secondary antibody (green), while alpha tubulin was co-stained with a Cy3-conjugated secondary antibody (red) to visualize the cytoskeleton. ATF1 staining is predominantly nuclear, consistent with its function as a CREB family transcription factor. This ATF1 Antibody is suitable for investigating transcriptional regulation, signal transduction and protein localization.



ATF1 Antibody Human, Rat and Mouse WB. Western blot analysis of ATF1 Antibody / CREB Family Transcription Factor Antibody detected a major band at approximately 35 kDa, near the predicted 29 kDa molecular weight of ATF1. Lane 1: human HeLa; Lane 2: human A431; Lane 3: human SiHa; Lane 4: rat testis; Lane 5: mouse testis lysate. The membrane was incubated with ATF1 antibody at 0.5 ug/ml followed by an HRP-conjugated secondary antibody. This ATF1 Antibody detects endogenous ATF1 across human, rat and mouse samples and supports studies of CREB family transcriptional regulation.



ATF1 Antibody Human PC-3 FACS. Flow cytometric analysis of fixed and permeabilized human PC-3 cells stained with ATF1 Antibody / CREB Family Transcription Factor Antibody at 1 ug/million cells. Red: blank control; Green: isotype control; Blue: ATF1 antibody. The clear rightward shift of the ATF1 antibody population demonstrates specific detection of endogenous ATF1. This ATF1 Antibody is suitable for flow cytometric analysis of intracellular CREB family transcription factor expression in human cells.

Description

ATF1 Antibody / CREB Family Transcription Factor Antibody recognizes Activating Transcription Factor 1 (ATF1), a member of the CREB/ATF family of basic leucine zipper transcription factors that regulate gene expression in response to diverse extracellular signals. ATF1 binds cyclic AMP response elements within promoter regions after forming homo- or heterodimers with related transcription factors, including CREB and CREM. Its activity is regulated through phosphorylation by kinases such as protein kinase A and mitogen-activated protein kinases, allowing ATF1 to coordinate transcriptional programs involved in cell growth, differentiation, survival and stress adaptation. NSJ Bioreagents provides ATF1 antibodies for investigators studying transcriptional regulation, signal transduction and disease biology.

ATF1 is expressed in numerous tissues and functions downstream of signaling pathways activated by hormones, growth factors and cellular stress. Once activated, ATF1 regulates genes involved in metabolism, immune responses, apoptosis and proliferation. Altered ATF1 activity has been associated with several cancers, including tumors carrying EWSR1-ATF1 or FUS-ATF1 gene fusions, as well as with neurological disorders and inflammatory diseases. Because ATF1 integrates multiple signaling pathways into coordinated transcriptional responses, it remains an important target in cancer biology, molecular genetics and cell signaling research.

Current research examines how ATF1 interacts with CREB family members, coactivators and chromatin remodeling complexes to regulate transcription. Investigators also study its role in cellular responses to oxidative stress, DNA damage and metabolic changes. Measuring ATF1 expression and phosphorylation can provide valuable insight into signaling pathway activation, transcriptional control and mechanisms that contribute to development, tissue homeostasis and disease progression.

An ATF1 Antibody is a valuable reagent for detecting this CREB family transcription factor by Western blotting, immunohistochemistry, immunofluorescence, flow cytometry and related immunoassays. By enabling reliable analysis of protein expression and localization, an ATF1 Antibody supports investigations into transcriptional regulation, signal transduction and CREB family biology.

Researchers studying transcriptional regulation may also be interested in our Transcription Factor Antibodies page, featuring antibodies against DNA-binding proteins that regulate gene expression, development and cellular signaling.

Application Notes

The stated application concentrations are suggested starting points. Titration of the ATF1 Antibody / CREB Family Transcription Factor Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Human partial recombinant protein (AA 1-271) was used as the immunogen for this ATF1 antibody.

Storage

After reconstitution, the ATF1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

ATF1 antibody, Activating Transcription Factor 1 antibody, Cyclic AMP Dependent Transcription Factor ATF1 antibody, CREB Family Transcription Factor antibody

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