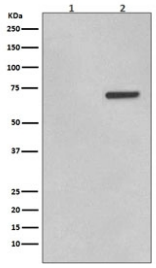
Phospho-ATF2 Thr71 Antibody FOO-1 / ATF2 Phospho Thr71 Monoclonal Antibody [clone FOO-1] (RQ5448)

Catalog No.	Formulation	Size
RQ5448	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	FOO-1
Purity	Affinity purified
UniProt	P15336
Applications	Western blot: 1:500-1:2000
Limitations	This Phospho-ATF2 Thr71 Antibody FOO-1 / ATF2 Phospho Thr71 Monoclonal Antibody is available for research use only.



Phospho-ATF2 Thr71 Antibody FOO-1 WB Analysis of Untreated and Anisomycin-Treated HeLa Cells. Western blot analysis of human HeLa cell lysates, untreated (lane 1) or treated with anisomycin (lane 2), using ATF2 Phospho Thr71 Monoclonal Antibody clone FOO-1. A prominent immunoreactive band near 70 kDa is detected following anisomycin treatment, while little signal is observed in untreated lysate. The increased signal is consistent with stress-induced phosphorylation of ATF2 at Thr71.

Description

Phospho-ATF2 Thr71 Antibody FOO-1 / ATF2 Phospho Thr71 Monoclonal Antibody targets activating transcription factor 2 (ATF2) phosphorylated at threonine 71. ATF2 is a member of the ATF/CREB family of basic leucine zipper transcription factors that regulate gene expression in response to extracellular signals and cellular stress. It binds cyclic AMP response elements (CREs) and related regulatory DNA sequences, participating in transcriptional programs associated with proliferation, differentiation, inflammation, and cellular survival.

ATF2 contains a basic DNA-binding region and a leucine zipper domain that enables homodimerization and heterodimerization with other transcription factors, particularly c-Jun. These interactions contribute to activator protein 1 (AP-1) transcriptional complexes, which regulate genes involved in cellular adaptation and stress responses. The activity of ATF2-containing complexes depends on their composition, DNA-binding preferences, and the signaling pathways controlling their constituent proteins.

Phosphorylation at Thr71 is a major regulatory event in ATF2 activation. Stress-responsive mitogen-activated protein kinases, including p38 MAPK and c-Jun N-terminal kinase (JNK), phosphorylate ATF2 at Thr71 and the adjacent Thr69 residue. These modifications promote transcriptional activation by influencing the regulatory properties of ATF2. Stimuli associated with ATF2 phosphorylation include inflammatory cytokines, ultraviolet radiation, oxidative stress, and other environmental challenges. The Thr71 phosphorylation state consequently provides information about the activity of stress-responsive signaling pathways.

ATF2 phosphorylation contributes to the regulation of genes involved in inflammatory signaling, DNA damage responses, cell growth, and survival. Its biological effects are context-dependent because ATF2 interacts with different transcription factors and regulatory proteins. In cancer biology, altered MAPK signaling and ATF2 activation have been associated with changes in proliferation, stress resistance, and cellular adaptation. Phosphorylation-dependent regulation allows ATF2 activity to change without corresponding alterations in total protein abundance.

Phospho-ATF2 Thr71 Antibody FOO-1 supports investigations into the activation state of ATF2 and its relationship to MAPK signaling. Comparing Thr71 phosphorylation with total ATF2 expression can help distinguish changes in signaling-dependent transcription factor activation from changes in overall protein abundance.

For studies requiring a monoclonal alternative, explore our ATF2 Antibody PCRP-ATF2-1B4, which features HuProt protein microarray validation and complementary cellular staining data.

Application Notes

Optimal dilution of the Phospho-ATF2 Thr71 Antibody FOO-1 / ATF2 Phospho Thr71 Monoclonal Antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human ATF2 (surrounding pT71) was used as the immunogen for the Phospho-ATF2 Thr71 Antibody FOO-1.

Storage

Store the Phospho-ATF2 Thr71 Antibody FOO-1 at -20oC.

Alternate Names

ATF2 phospho Thr71 antibody, ATF2 phosphorylated Thr71 antibody, Phospho-ATF2 T71 antibody, ATF2 pT71 antibody, Phosphorylated activating transcription factor 2 antibody, Phospho-ATF-2 Thr71 antibody, Phospho-CREB2 Thr71 antibody, ATF2 phosphothreonine 71 antibody, Activating transcription factor 2 phospho T71 antibody, ATF2 Thr71 phospho-specific antibody

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