

Phospho-ATF2 (Thr71) (G3) rabbit mAb APC conjugate

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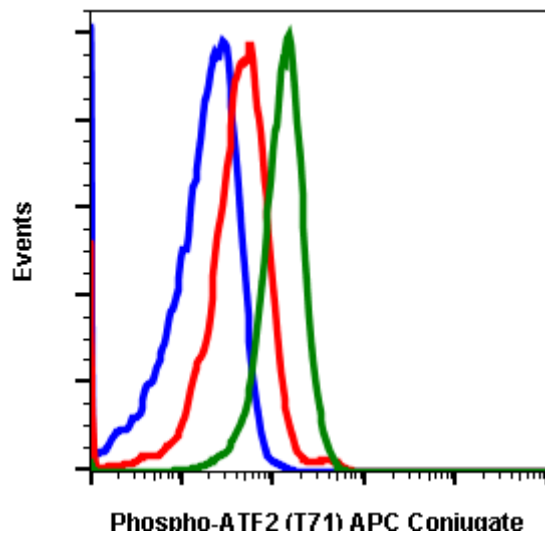
Catalog: #2059

Store at: 2-8°C

For Research Use Only. Not For Use In Diagnostic Procedures.

Applications	Detection	Clonality	Isotype
Flow Cytometry	N/A	Monoclonal	Rabbit IgGκ

Format:	APC
Cross Reactivity:	Predicted to work with mouse, rat and other homologues.
Formulation:	1X PBS, 0.09% NaN ₃ , 0.2% BSA
Preparation:	Protein A+G
Reactivity:	Human, Mouse
Recommended Usage:	For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells or 5 µL per 100 µL of staining volume. It is recommended that the reagent be titrated for optimal performance for each application.
Immunogen:	A synthetic phospho-peptide corresponding to residues surrounding Thr71 of human phospho ATF2
Description:	Activating transcription factor 2 (ATF2), known as cyclic AMP (cAMP) response element (CRE) binding protein 2 (CREB2) and CRE-BP1 is a member of the activating protein-1 (AP1) transcription factor family. Through homo-dimerization or hetero-dimerization with other AP1 family members, such as the CREB, Fos, Maf, or Jun family transcription factor, it regulates the expression of many genes. ATF2 is an important mediator of mammalian cell responses to various stimuli, including stress. As a transcription factor, ATF2 acts as transducing extracellular signals to the nucleus to facilitate transcriptional responses to stimuli. ATF2 is stimulated by growth factors, ultraviolet (UV) radiation, and cytokines. Stress-activated protein kinases (SAPKs)(e.g. p38 MAP Kinase) induce transcriptional activation of ATF2. ATF2 is phosphorylated at amino acids threonine-69 and threonine-71 (T69, T71). Phosphorylation at these threonine residues is essential for maximal transcriptional activity downstream of insulin/epidermal growth factor stimulation and is dependent on cooperation between c-Jun N-terminal kinase (JNK) and signaling cascades downstream of Ras. Upon T69/T71 phosphorylation, ATF2 interacts with other AP1 proteins and translocate to the nucleus to regulate the expression of hundreds of genes.
References:	Shaulian E, and Karin M., (2002) Nat Cell Biol. 4:131-136. Shimizu M, et al., (1998) Exp Cell Res. 239:93-103. Lau E, and Ronai ZA. (2012) J Cell Sci. 125:2815-2824. Bailey J, and Europe-Finner GN. (2005), J Mol Endocrinol. 34:19-35. Raingaud J, et al., (1995) J Biol Chem. 270:7420-7426. Ouwens DM, et al., (2002) EMBO J. 21:3782-3793. Livingstone C, et al., (1995) EMBO J. 1995,14:1785-97. Yamasaki T, et al., (2009). J Biol Chem 284:8567-8581. Lau E, et al., (2012) Cell 148:543-555. Bhoulmick A, et al., (2005) Mol Cell 18:577-587.



Flow cytometric analysis of Jurkat cells secondary antibody only negative control (blue) or untreated (red) or treated with anisomycin (green) using Phospho-ATF-2 (Thr71) APC conjugated antibody ATF2T71-G3. Cat #2059.