## Phospho-ATF2 (Thr71) (G3) rabbit mAb PE conjugate

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

Format: PE

**Cross Reactivity:** Predicted to work with mouse, rat and other homologues.

**Formulation:** 1X PBS, 0.09% NaN3, 0.2% BSA

**Preparation:** Protein A+G

**Reactivity:** Human, Mouse

Recommended

**Usage:** 

For flow cytometric staining, the suggested use of this reagent is 5  $\mu$ L per million cells or 5  $\mu$ L per 100  $\mu$ L 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.

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

ATF2 is phosphorylated at amino acids threonine-69 and threonine-71 (T69, T71).

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.

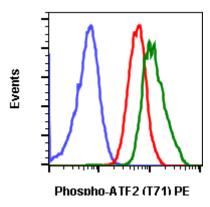
Bailey J, and Europe-Finner GN. (2005), J Mol Endocrinol. 34:19–35.

Raingeaud 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 48:543-555.

Bhoumik 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) PE conjugated antibody ATF2T71-G3. Cat #2057.