

Phospho-Thr52 Activating Transcription Factor 2 (ATF2) Antibody

Affinity purified rabbit polyclonal antibody Catalog # AN1235

Specification

Phospho-Thr52 Activating Transcription Factor 2 (ATF2) Antibody - Product Information

Application WB
Primary Accession P15336
Reactivity Human
Host Rabbit
Clonality polyclonal
Calculated MW 74 KDa

Phospho-Thr52 Activating Transcription Factor 2 (ATF2) Antibody - Additional Information

Gene ID 1386
Gene Name ATF2

Other Names

Cyclic AMP-dependent transcription factor ATF-2, cAMP-dependent transcription factor ATF-2, Activating transcription factor 2, Cyclic AMP-responsive element-binding protein 2, CREB-2, cAMP-responsive element-binding protein 2, HB16, Histone acetyltransferase ATF2, cAMP response element-binding protein CRE-BP1, ATF2, CREB2, CREBP1

Target/Specificity

Synthetic phospho-peptide corresponding to amino acid residues surrounding THr52 conjugated to KLH.

Dilution

WB~~ 1:250

Format

Prepared from rabbit serum by affinity purification via sequential chromatography on phospho and dephosphopeptide affinity columns.

Antibody Specificity

Specific for the ~72k ATF2 protein phosphorylated at Thr52. Immunolabeling of the ATF2 band is reduced by treatment of the cells with the PKC catalytic inhibitor Gö6850.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Phospho-Thr52 Activating Transcription Factor 2 (ATF2) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

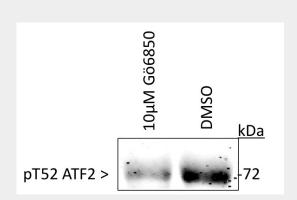


Phospho-Thr52 Activating Transcription Factor 2 (ATF2) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Phospho-Thr52 Activating Transcription Factor 2 (ATF2) Antibody - Images



Western blot of UACC903 melanoma cell line lysate (DMSO) showing specificimmunolabeling of the \sim 72k ATF2 protein phosphorylated at Thr52. Immunolabelingis reduced by treatment of the lysate with the PKC catalytic inhibitor Gö6850.Image courtesy of Eric Lau and Ze'ev Ronai.

Phospho-Thr52 Activating Transcription Factor 2 (ATF2) Antibody - Background

The transcription factor ATF2 is a member of the ATF/CREB family of leucine zipper proteins. In response to stress stimuli, it activates a variety of gene targets that are involved in oncogenesis, and has been correlated with maintenance of a cancer cell phenotype (Vlahopoulos et al., 2008). Inhibiting ATF2 impedes melanoma development and elicits tumor suppressor function (Bhoumik et al., 2008). To act as a tumor suppressor, ATF2 must localize at the mitochondria, and phosphorylation at Thr52 by PKCε regulates this translocation (Lau et al., 2012).

Phospho-Thr52 Activating Transcription Factor 2 (ATF2) Antibody - References

Vlahopoulos SA, Logotheti S, Mikas D, Giarika A, Gorgoulis V, and Zoumpourlis V. (2008) The role of ATF-2 in oncogenesis. Bioessays Apr;30(4):314-27. Review.

Bhoumik A and Ronai Z. (2008) ATF2: a transcription factor that elicits oncogenic or tumor suppressor activities. Cell Cycle Aug;7(15):2341-5. Epub 2008 Jun17. Review.

Lau E, Kluger H, Varsano T, Lee K, Scheffler I, Rimm D, Ideker T, and Ronai Z. (2012) PKC Promote Oncogenic Functions of ATF2 in the Nucleus while Blocking Its Apoptotic Function at Mitochondria. Cell 148, 543-555.