# ARG52232
# anti-ATF2 phospho (Thr52) antibody

Package: 50 µl
Store at: -20°C

## Summary

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| Product Description | Rabbit Polyclonal antibody recognizes ATF2 phospho (Thr52) |
| Tested Reactivity | Hu |
| Tested Application | WB |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Target Name | ATF2 |
| Species | Human |
| Immunogen | Synthetic phospho-peptide corresponding to amino acid residues surrounding THr52 conjugated to KLH |
| Conjugation | Un-conjugated |
| Alternate Names | EC 2.3.1.48; Histone acetyltransferase ATF2; Activating transcription factor 2; cAMP-dependent transcription factor ATF-2; Cyclic AMP-dependent transcription factor ATF-2; CREB2; HB16; CREB-2; Cyclic AMP-responsive element-binding protein 2; cAMP-responsive element-binding protein 2; CRE-BP1; cAMP response element-binding protein CRE-BP1; TREB7 |

## Application Instructions

Application table

| Application | Dilution |
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| WB | 1:250 |

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| Application Note | 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.<br>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |
| Positive Control | Human UACC903 melanoma cells |

## Properties

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| Form | Liquid |
| Purification | Affinity Purified |
| Buffer | 10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol |
| Stabilizer | 0.1 mg/ml BSA, 50% Glycerol |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |
| Note | For laboratory research only, not for drug, diagnostic or other use. |

## Bioinformation

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| Database links | GeneID: 1386 Human<br><br>Swiss-port # P15336 Human |
| Gene Symbol | ATF2 |
| Gene Full Name | activating transcription factor 2 |
| 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). |
| Research Area | Gene Regulation antibody; Immune System antibody |
| Calculated Mw | 55 kDa |
| PTM | Phosphorylation of Thr-69 by MAPK14 and MAPK11, and at Thr-71 by MAPK1/ERK2, MAPK3/ERK1, MAPK11, MAPK12 and MAPK14 in response to external stimulus like insulin causes increased transcriptional activity. Phosphorylated by PLK3 following hyperosmotic stress. Also phosphorylated and activated by JNK and CaMK4. ATM-mediated phosphorylation at Ser-490 and Ser-498 stimulates its function in DNA damage response. Phosphorylation at Ser-62, Thr-73 and Ser-121 activates its transcriptional activity. Phosphorylation at Thr-69 or Thr-71 enhances its histone acetyltransferase (HAT) activity. |