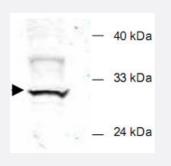
ATF3 polyclonal antibody

Catalog # PAB10024 Size 100 ug

Applications



Western Blot (Transfected lysate)

Western blot of mammalian whole cell extract transfected with HA epitope tagged human ATF3. ATF3 polyclonal antibody (Cat # PAB10024) detects a band ~31 KDa corresponding to recombinant human ATF3. Immunostaining using anti-HA epitope tag antibody confirms the composition of the recombinant band (not shown). The protein was transferred to nitrocellulose in 30 minutes using standard methods. After blocking with 5% goat serum and 0.5% non-fat milk in PBS, the membrane was probed with the primary antibody diluted 1 : 200 in 0.2X blocking buffer in PBS overnight at 4°C. Reaction was followed by washes and reaction with a 1 : 5000 dilution of IRDye™800 conjugated Gt-a-Rabbit IgG [H&L] for 30 min at room temperature. LICOR's Odyssey® Infrared Imaging System was used to scan and process the image.

Other detection systems willyield similar results.

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic peptide of ATF3.
Immunogen	A synthetic peptide corresponding to amino acids 113-130 of human ATF3.
Host	Rabbit
Reactivity	Human
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.



Product Information

Recommend Usage	ELISA (1:5000-1:20000) Western Blot (1:200) The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM KH ₂ PO ₄ , 150 mM NaCl, pH 7.2 (0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

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Immunostaining using anti-HA epitope tag antibody confirms the composition of the recombinant band (not shown).

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After blocking with 5% goat serum and 0.5% non-fat milk in PBS, the membrane was probed with the primary antibody diluted 1 : 200 in 0.2X blocking buffer in PBS overnight at 4°C.

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Enzyme-linked Immunoabsorbent Assay

Gene Info — ATF3

Entrez GenelD	<u>467</u>
Gene Name	ATF3
Gene Alias	-
Gene Description	activating transcription factor 3
Omim ID	<u>603148</u>
Gene Ontology	Hyperlink

😭 Abnova	Product Information
Gene Summary	Activating transcription factor 3 is a member of the mammalian activation transcription factor/cAM P responsive element-binding (CREB) protein family of transcription factors. Multiple transcript va riants encoding two different isoforms have been found for this gene. The longer isoform represse s rather than activates transcription from promoters with ATF binding elements. The shorter isofor m (deltaZip2) lacks the leucine zipper protein-dimerization motif and does not bind to DNA, and it stimulates transcription presumably by sequestering inhibitory co-factors away from the promoter. It is possible that alternative splicing of the ATF3 gene may be physiologically important in the reg ulation of target genes. [provided by RefSeq
Other Designations	ATF3deltaZip2 ATF3deltaZip2c ATF3deltaZip3 OTTHUMP00000034887 OTTHUMP000000348 90

Publication Reference

 Induction of ATF3 by ionizing radiation is mediated via a signaling pathway that includes ATM, Nibrin1, stressinduced MAPkinases and ATF-2.

Kool J, Hamdi M, Cornelissen-Steijger P, van der Eb AJ, Terleth C, van Dam H. Oncogene 2003 Jul; 22(27):4235.

Application: WB, Human, Human diploid fibroblasts

• <u>ATF3 induction following DNA damage is regulated by distinct signaling pathways and over-expression of</u> <u>ATF3 protein suppresses cells growth.</u>

Fan F, Jin S, Amundson SA, Tong T, Fan W, Zhao H, Zhu X, Mazzacurati L, Li X, Petrik KL, Fornace AJ Jr, Rajasekaran B, Zhan Q.

Oncogene 2002 Oct; 21(49):7488.

Application: WB-Tr, Human, HeLacells

• ATF3 and stress responses.

Hai T, Wolfgang CD, Marsee DK, Allen AE, Sivaprasad U. Gene Expression 1999 Jan; 7(4-6):321.

Application: WB-Ce, WB-Tr, Human, Mammalian cells

Disease

- <u>Cardiovascular Diseases</u>
- Cryptorchidism
- Diabetes Mellitus
- Edema

😵 Abnova

- Genetic Predisposition to Disease
- Hypospadias
- Kidney Failure