

# 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 will yield similar results.



## Specification

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

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

## 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 will yield similar results.

- Enzyme-linked Immunoabsorbent Assay

## Gene Info — ATF3

<b>Entrez GeneID</b>	<a href="#">467</a>
<b>Gene Name</b>	ATF3
<b>Gene Alias</b>	-
<b>Gene Description</b>	activating transcription factor 3
<b>Omim ID</b>	<a href="#">603148</a>
<b>Gene Ontology</b>	<a href="#">Hyperlink</a>

## Gene Summary

Activating transcription factor 3 is a member of the mammalian activation transcription factor/cAMP responsive element-binding (CREB) protein family of transcription factors. Multiple transcript variants encoding two different isoforms have been found for this gene. The longer isoform represses rather than activates transcription from promoters with ATF binding elements. The shorter isoform (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 regulation of target genes. [provided by RefSeq]

## Other Designations

ATF3deltaZip2|ATF3deltaZip2c|ATF3deltaZip3|OTTHUMP00000034887|OTTHUMP00000034890

## Publication Reference

- [Induction of ATF3 by ionizing radiation is mediated via a signaling pathway that includes ATM, Nibrin1, stress-induced 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

- [ATF3 induction following DNA damage is regulated by distinct signaling pathways and over-expression of ATF3 protein suppresses cells growth.](#)

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, HeLa cells

- [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

- [Cardiovascular Diseases](#)
- [Cryptorchidism](#)
- [Diabetes Mellitus](#)
- [Edema](#)

- [Genetic Predisposition to Disease](#)
- [Hypospadias](#)
- [Kidney Failure](#)