

Datasheet for ABIN6260094

anti-ATF4 antibody[Go to Product page](#)**2** Images**1** Publication

Overview

Quantity:	100 µL
Target:	ATF4
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ATF4 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunocytochemistry (ICC), Immunofluorescence (IF)

Product Details

Immunogen:	A synthesized peptide derived from human ATF4
Isotype:	IgG
Specificity:	ATF4 Antibody detects endogenous levels of total ATF4.
Predicted Reactivity:	Pig,Bovine,Horse,Sheep,Dog,Chicken
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

Target Details

Target:	ATF4
Alternative Name:	ATF4 (ATF4 Products)

Target Details

Background:	<p>Description: Transcriptional activator. Binds the cAMP response element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular promoters. Cooperates with FOXO1 in osteoblasts to regulate glucose homeostasis through suppression of beta-cell production and decrease in insulin production (By similarity). It binds to a Tax-responsive enhancer element in the long terminal repeat of HTLV-I. Regulates the induction of DDIT3/CHOP and asparagine synthetase (ASNS) in response to endoplasmic reticulum (ER) stress. In concert with DDIT3/CHOP, activates the transcription of TRIB3 and promotes ER stress-induced neuronal apoptosis by regulating the transcriptional induction of BBC3/PUMA. Activates transcription of SIRT4. Regulates the circadian expression of the core clock component PER2 and the serotonin transporter SLC6A4. Binds in a circadian time-dependent manner to the cAMP response elements (CRE) in the SLC6A4 and PER2 promoters and periodically activates the transcription of these genes. During ER stress response, activates the transcription of NLRP1, possibly in concert with other factors (PubMed:26086088).</p> <p>Gene: ATF4</p>
Molecular Weight:	39kDa
Gene ID:	468
UniProt:	P18848
Pathways:	Thyroid Hormone Synthesis , Myometrial Relaxation and Contraction , ER-Nucleus Signaling , Unfolded Protein Response

Application Details

Application Notes:	WB 1:500-1:2000, IHC 1:50-1:200, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

Storage: -20 °C

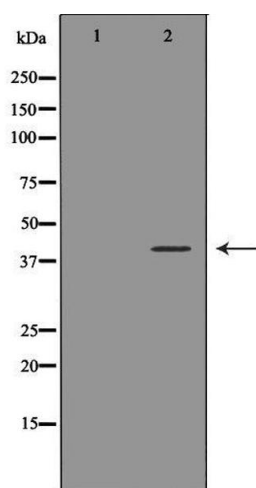
Storage Comment: Store at -20 °C. Stable for 12 months from date of receipt.

Expiry Date: 12 months

Publications

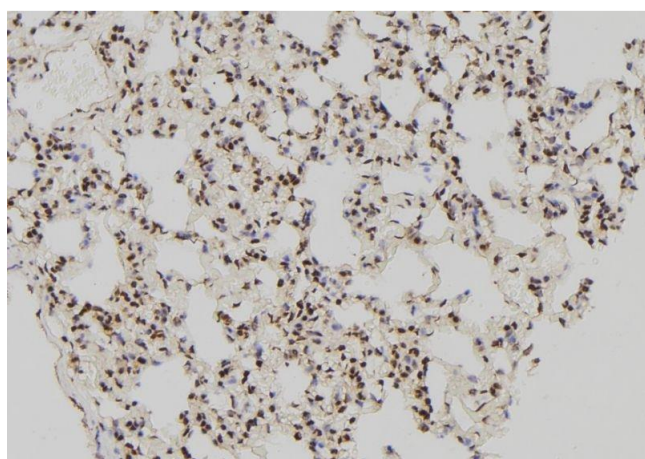
Product cited in: Liu, Shen, Wang, Liu, Zheng, Luo: "EndophilinA2 protects against angiotensin II-induced cardiac hypertrophy by inhibiting angiotensin II type 1 receptor trafficking in neonatal rat cardiomyocytes." in: **Journal of cellular biochemistry**, (2018) ([PubMed](#)).

Images



Western Blotting

Image 1. Western blot analysis of MCF-7 cell lysate, using ATF4 Antibody. The lane on the left is treated with the antigen-specific peptide.



Immunohistochemistry

Image 2. ABIN6276288 at 1/100 staining Rat lung tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary