

Datasheet for 200-303-W61**ATF4 Antibody Peroxidase****Overview**

Description:	Anti-ATF4 (MOUSE) Monoclonal Antibody Peroxidase Conjugated - 200-303-W61
Item No.:	200-303-W61
Size:	100 µg
Applications:	IHC, WB
Reactivity:	Human, Rat
Host Species:	Mouse

Product Details

Background:	Cyclic AMP-dependent transcription factor ATF-4 (ATF4) is a basic leucine-zipper (bZip) transcription factor, which regulates amino acid metabolism, DNA damage repair, chromatin remodeling, and apoptosis in response to cellular and ER stress. ATF4 works with various proteins, such as C/EBP homology protein (CHOP), asparagine synthetase (ASNS), and cAMP response element (CRE) among others to mediate cellular stress. ATF4 also regulates glucose homeostasis by suppressing beta-cell proliferation and insulin production. Furthermore, ATF4 targets the histone demethylase JMJD3 to alter chromatin structure and enhance gene transcription in response to amino acid deprivation. Anti-ATF4 is ideal for researchers interested in Cell Signaling, Oncology, Cell Differentiation, and Apoptosis; relevant pathways include MAPK signaling pathways, Activation of cAMP-Dependent PKA, CREB pathways, GPCR pathways and Rho Family GTPases.
Synonyms:	Activating Transcription Factor 4, ATF 4, ATF4 protein, cAMP-dependent transcription factor ATF-4, cAMP-responsive element-binding protein 2, CREB 2, CREB-2, CREB2, Cyclic AMP dependent transcription factor ATF 4
Host Species:	Mouse
Conjugate:	Peroxidase (HRP)
Clonality:	Monoclonal
Clone ID:	S360A-24
Format:	IgG2a

Target Details

Gene Name:	ATF4
Reactivity:	Human, Rat
Immunogen Type:	Recombinant Protein
Immunogen:	Anti-ATF4 Antibody was produced by repeated immunization of mice with a fusion protein containing amino acids 25-327 of human ATF4.
Purity/Specificity:	Anti-ATF4 Antibody was purified from concentrated tissue culture supernate by Protein G chromatography. BLAST analysis suggests that it is 85% identical to mouse, 86% identical to rat and <50% identical to ATF5. Will not cross react with ATF5.
Relevant Links:	• UniProtKB - P18848 • GenelD - 468

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-ATF4 HRP Conjugated Antibody is tested for Western Blots and Immunocytochemistry. Expect a band approximately ~60 kDa on specific lysates or tissues. Does not cross react with ATF5. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IHC:	User Optimized
WB:	1:1000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1mg/mL by UV absorbance at 280 nm

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Conjugated antibodies should be stored according to the product label. Product stored in 73.64mM Carbonate, 54.55mM Ethanolamine, 45.45mM Cyanoborohydride, 18.18mM Sodium Hydroxide and 0.23mM Citrate in dH2O.
Expiration:	Expiration date is one (1) year from date of receipt.

Disclaimer

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