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Datasheet for 200-305-W61

ATF4 Antibody Alkaline Phosphatase

Overview

Description:	Anti-ATF4 (MOUSE) Monoclonal Antibody Alkaline Phosphatase Conjugated - 200-305-W61
Item No.:	200-305-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), aspargine 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:	Alkaline Phosphatase (AP)
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 • GeneID - 468

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-ATF4 Alkaline Phosphatase 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
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.1% (w/v) Sodium Azide
Stabilizer:	50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Wet Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.