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Anti-ATF6 Picoband Antibody
Catalog # ABO10099

Specification

Anti-ATF6 Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P18850
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Cyclic AMP-dependent transcription factor ATF-6 alpha(ATF6) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-ATF6 Picoband Antibody - Additional Information

Gene ID 22926

Other Names
Cyclic AMP-dependent transcription factor ATF-6 alpha, cAMP-dependent transcription factor ATF-6 alpha, Activating transcription factor 6 alpha, ATF6-alpha, Processed cyclic AMP-dependent transcription factor ATF-6 alpha, ATF6

Calculated MW
74585 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization
Endoplasmic reticulum membrane; Single-pass type II membrane protein.

Tissue Specificity
Ubiquitous.

Protein Name
Cyclic AMP-dependent transcription factor ATF-6 alpha

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human ATF6 (597-629aa AININENVINGQDYEVMMQIDCQVMDTRILHIK), different from the related mouse and rat sequences

by one amino acid.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-ATF6 Picoband Antibody - Protein Information

Name ATF6

Function
[Cyclic AMP-dependent transcription factor ATF-6 alpha]: Precursor of the transcription factor form (Processed cyclic AMP- dependent transcription factor ATF-6 alpha), which is embedded in the endoplasmic reticulum membrane (PubMed:10564271, PubMed:11158310, PubMed:11779464). Endoplasmic reticulum stress promotes processing of this form, releasing the transcription factor form that translocates into the nucleus, where it activates transcription of genes involved in the unfolded protein response (UPR) (PubMed:10564271, PubMed:11158310, PubMed:11779464).

Cellular Location
Endoplasmic reticulum membrane; Single-pass type II membrane protein. Golgi apparatus membrane; Single-pass type II membrane protein. Note=Translocates from the endoplasmic reticulum to the Golgi, where it is processed.

Tissue Location
Ubiquitous..

Anti-ATF6 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-ATF6 Picoband Antibody - Images

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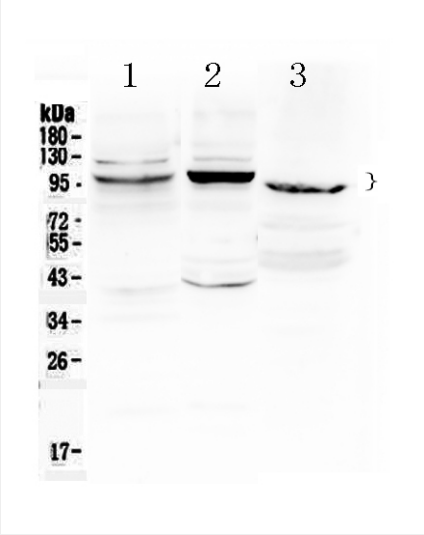

Figure 1. Western blot analysis of ATF6 using anti- ATF6 antibody (ABO10099). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat liver tissue lysates, Lane 2: mouse liver tissue lysates, Lane 3: MCF-7 whole Cell lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- ATF6 antigen affinity purified polyclonal antibody (Catalog # ABO10099) at 0.5 Î¼g/mL overnight at 4Â°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for ATF6 at approximately 90 KD,100KD. The expected band size for ATF6 is at 75KD.

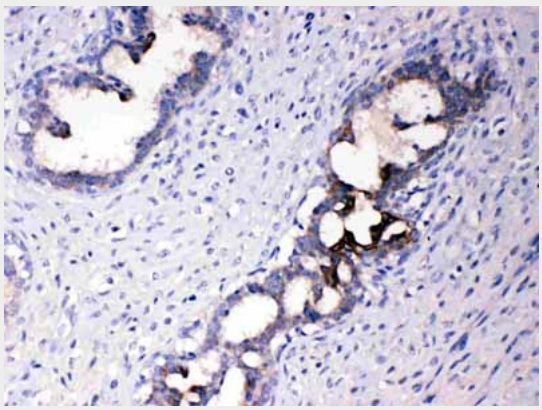

Figure 2. IHC analysis of ATF6 using anti- ATF6 antibody (ABO10099).ATF6 was detected in paraffin-embedded section of human mammary cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti- ATF6 Antibody (ABO10099) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-ATF6 Picoband Antibody - Background

ATF6, a member of the leucine zipper protein family, is an endoplasmic reticulum (ER) stress-regulated transmembrane transcription factor that activates the transcription of ER molecules. This gene is mapped to chromosome 1q23.3. ATF6 can constitutively induce the

promoter of glucose-regulated protein (grp) genes through activation of the endoplasmic reticulum (ER) stress element (ERSE).