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Anti-ATF6 Picoband Antibody

Catalog # ABO10099

Product Information

Application	WB, IHC-P
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.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Endoplasmic reticulum membrane; Single-pass type II membrane protein.
Tissue Specificity	Ubiquitous.
Source	Eukaryota
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.

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..

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).

Images

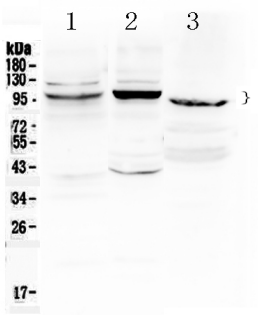

Figure 1. Western blot analysis of ATF6 using anti- ATF6 antibody (ABO10099). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat liver tissue 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 □¼g/mL overnight at 4 □°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.

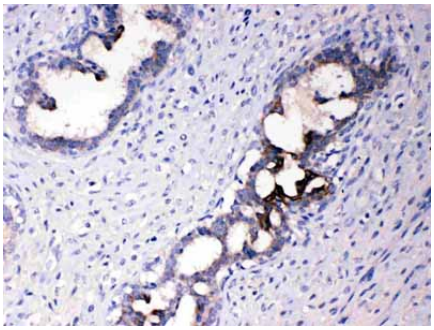

Figure 2. IHC analysis of ATF6 using anti- ATF6 antibody (ABO10099).ATF6 was detected in paraffin-embedded section of human mammary cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 □¼g/ml rabbit anti- ATF6 Antibody (ABO10099) overnight at 4 □°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 □°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.