

Anti-ATF7 Rabbit Monoclonal Antibody
Catalog # ABO13460

Specification

Anti-ATF7 Rabbit Monoclonal Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | WB |
| Primary Accession | P17544 |
| Host | Rabbit |
| Isotype | Rabbit IgG |
| Reactivity | Rat, Human, Mouse |
| Clonality | Monoclonal |
| Format | Liquid |

Description

Anti-ATF7 Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Mouse, Rat.

Anti-ATF7 Rabbit Monoclonal Antibody - Additional Information

Gene ID 11016

Other Names

Cyclic AMP-dependent transcription factor ATF-7, cAMP-dependent transcription factor ATF-7, Activating transcription factor 7, Transcription factor ATF-A, ATF7, ATFA

Calculated MW

52967 MW KDa

Application Details

WB 1:500-1:1000

Subcellular Localization

Nucleus. Nucleus, nucleoplasm. Mainly nucleoplasmic. Restricted distribution to the perinuclear region. The sumoylated form locates to the nuclear periphery.

Tissue Specificity

Expressed in heart, lung and skeletal muscle. Isoform 4 is expressed in various tissues including heart, brain, placenta, lung and skeletal muscle. Highest levels in skeletal muscle. Lowest in lung and placenta..

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human ATF7

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-ATF7 Rabbit Monoclonal Antibody - Protein Information**Name** ATF7**Synonyms** ATFA**Function**

Stress-responsive chromatin regulator that plays a role in various biological processes including innate immunological memory, adipocyte differentiation or telomerase regulation (PubMed: 29490055). In absence of stress, contributes to the formation of heterochromatin and heterochromatin-like structure by recruiting histone H3K9 tri- and di-methyltransferases thus silencing the transcription of target genes such as STAT1 in adipocytes, or genes involved in innate immunity in macrophages and adipocytes (By similarity). Stress induces ATF7 phosphorylation that disrupts interactions with histone methyltransferase and enhances the association with coactivators containing histone acetyltransferase and/or histone demethylase, leading to disruption of the heterochromatin-like structure and subsequently transcriptional activation (By similarity). In response to TNF-alpha, which is induced by various stresses, phosphorylated ATF7 and telomerase are released from telomeres leading to telomere shortening (PubMed: 29490055). Also plays a role in maintaining epithelial regenerative capacity and protecting against cell death during intestinal epithelial damage and repair (By similarity).

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00978, ECO:0000269|PubMed:17264123}. Nucleus, nucleoplasm. Chromosome, telomere. Note=Mainly nucleoplasmic. Restricted distribution to the perinuclear region. The sumoylated form locates to the nuclear periphery

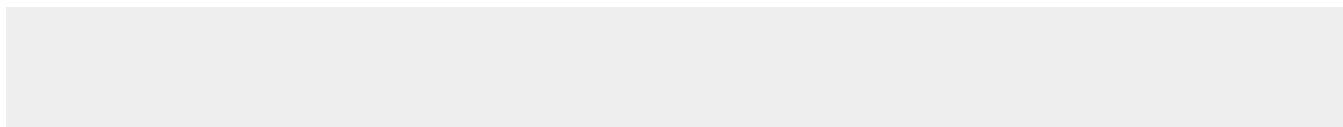
Tissue Location

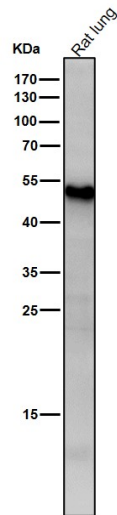
Expressed in various tissues including heart, brain, placenta, lung and skeletal muscle. Highest levels in skeletal muscle. Lowest in lung and placenta.

Anti-ATF7 Rabbit Monoclonal Antibody - Protocols

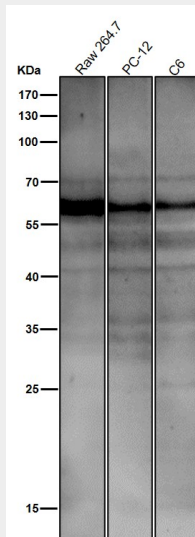
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

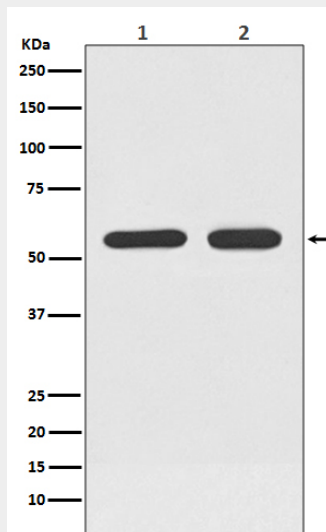
Anti-ATF7 Rabbit Monoclonal Antibody - Images



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



Western blot analysis of ATF7 expression in (1) Raji cell lysate; (2) Raw 264.7 cell lysate.