

# ATF7 (6P17) Rabbit Monoclonal Antibody

ATF7 (6P17) Rabbit Monoclonal Antibody Catalog # AP93682

# Specification

# ATF7 (6P17) Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Calculated MW WB <u>P17544</u> Rat, Human, Mouse Monoclonal 51757

# ATF7 (6P17) 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

Dilution WB~~1:1000

Storage Conditions -20℃

## ATF7 (6P17) 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:<a href="http://www.uniprot.org/citations/29490055" target="\_blank">29490055</a>). 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:<a

href="http://www.uniprot.org/citations/29490055" target="\_blank">29490055</a>). 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 perinuculear region. The sumoylated form locates to the nuclear periphery

### **Tissue Location**

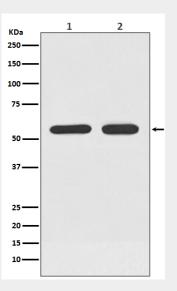
Expressed in various tissues including heart, brain, placenta, lung and skeletal muscle. Highest levels in skeletal muscle. Lowest in lung and placenta.

# ATF7 (6P17) Rabbit Monoclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### ATF7 (6P17) Rabbit Monoclonal Antibody - Images



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