

ATF7 (6P17) Rabbit Monoclonal Antibody

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Catalog # AP93682

Product Information

Application	WB
Primary Accession	P17544
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Calculated MW	51757

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°C

Protein Information

Name	ATF7
Synonyms	ATFA
Function	<p>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).</p>

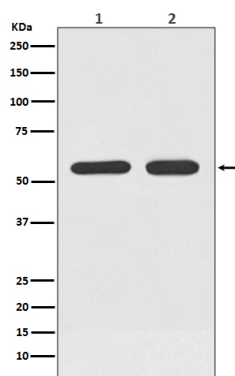
Cellular Location

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.

Images



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

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