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ATF7 Rabbit mAb

Catalog # AP77286

Product Information

Application	WB
Primary Accession	P17544
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Immunogen	A synthesized peptide derived from human ATF7
Purification	Affinity Chromatography
Calculated MW	51757

Additional Information

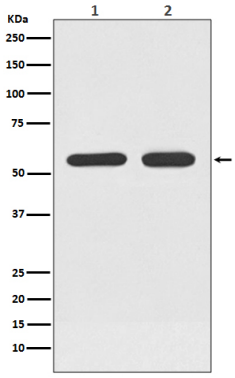
Gene ID	11016
Other Names	ATF7
Dilution	WB~~1/500-1/1000
Format	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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.

Images



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