

Rabbit Anti-phospho-ATF1 (Ser63) antibody

SL12535R

Product Name:	phospho-ATF1 (Ser63)
Chinese Name:	磷酸化活化转录因子1抗体
Alias:	ATF1 (phospho S63); p-ATF1 (phospho S63); Activating Transcription Factor1; TREB36 protein; ATF1; ATF1 EWS fusion gene ATF1 FUS fusion gene; cAMP dependent transcription factor 1; ATF1_HUMAN; Cyclic AMP dependent transcription factor ATF1; Cyclic AMP dependent transcription factor ATF1; EWS AFT1; FUS ATF1; RNA binding protein activating transcription factor 1 fusion protein; TREB 36; TREB36.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	29 kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human ATF1 around the phosphorylation site of Ser63:RP(p-S)YR
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed

ATF1 (Activating Transcription Factor 1, TREB-36) is a member of the ATF/CREB family of basic region leucine-zipper (bZip) DNA-binding proteins that regulates transcription by binding to a consensus cAMP response element (CRE) in the promoter of various viral and cellular genes. Many of these genes are important in cell growth and differentiation, and in stress and immune responses. The activation function of CRE-binding proteins may be modulated by phosphorylation of several kinases and is mediated by coactivators such as CREB-binding protein (CBP) and p300. ATF1 is a nuclear protein that binds DNA as a homodimer or as heterodimers with the inducible transcription factors CREB1 or CREM. Heterodimers appear to be stronger transcriptional activators than the homodimers. Tissue expression of ATF1 mRNA is widespread. Several isoforms of ATF1 arise by differential splicing. ATF1 mediates both Ca2+ and cAMP responses at several levels. It binds to the Tax-responsive element (TRE1) of the human T-cell lymphotropic virus type-I (HTLV1). ATF1 is detectable in metastatic melanoma cells and seems to contribute to their survival. A chimeric protein composed of the N-terminal domain of EWS (Ewing sarcoma oncogene) linked to the bZip domain of ATF1 is implicated in the rare malignant clear cell sarcoma of tendon sheath and aponeuroses (malignant melanoma of soft parts).

Function:

This protein binds the cAMP response element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular promoters. Binds to the Tax-responsive element (TRE) of HTLV-I. Mediates PKA-induced stimulation of CRE-reporter genes.

Product Detail:

Subcellular Location:

Nucleus.

DISEASE:

Defects in ATF1 may be a cause of angiomatoid fibrous histiocytoma (AFH) [MIM:612160]. A distinct variant of malignant fibrous histiocytoma that typically occurs in children and adolescents and is manifest by nodular subcutaneous growth. Characteristic microscopic features include lobulated sheets of histiocyte-like cells intimately associated with areas of hemorrhage and cystic pseudovascular spaces, as well as a striking cuffing of inflammatory cells, mimicking a lymph node metastasis. Note=Chromosomal aberrations involving ATF1 are found in patients with angiomatoid fibrous histiocytoma. Translocation t(12;16)(q13;p11.2) with FUS generates a chimeric ATF1/FUS protein. Translocation t(12;22)(q13;q12) with EWSR1 generates a chimeric ATF1/EWSR1 protein.

Similarity:

Belongs to the bZIP family. ATF subfamily.

Contains 1 bZIP domain.

Contains 1 KID (kinase-inducible) domain.

SWISS:

P18846

Gene ID:

466

Database links:

Entrez Gene: 466Human

Entrez Gene: 11908 Mouse

Entrez Gene: 315305Rat

Omim: 123803Human

SwissProt: P18846Human

SwissProt: P81269Mouse

Unigene: 648565Human

Unigene: 473546Mouse

Unigene: 676 Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.