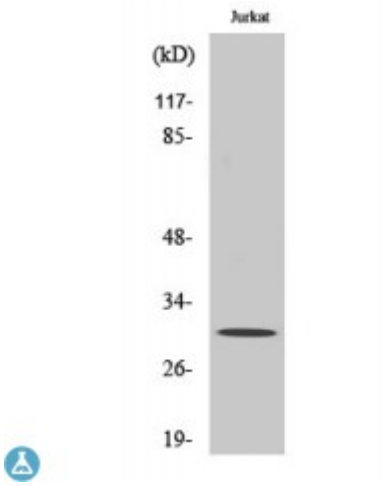
Anti-ATF-5 antibody



Description	Rabbit polyclonal to ATF-5.

Model	STJ91753
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IHC, WB
Immunogen	Synthesized peptide derived from human ATF-5
Immunogen Region	190-270 aa, C-terminal
Gene ID	22809
Gene Symbol	ATF5
Dilution range	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:5000
Specificity	ATF-5 Polyclonal Antibody detects endogenous levels of ATF-5 protein.
Tissue Specificity	Widely expressed with higher expression levels in liver.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Cyclic AMP-dependent transcription factor ATF-5 cAMP-dependent transcription factor ATF-5 Activating transcription factor 5 Transcription factor ATFx
Molecular Weight	31 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:790OMIM:606398
Alternative Names	Cyclic AMP-dependent transcription factor ATF-5 cAMP-dependent transcription factor ATF-5 Activating transcription factor 5 Transcription factor ATFx
Function	Transcription factor that either stimulates or represses gene transcription through binding of different DNA regulatory elements such as cAMP response element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), ATF5-specific response element (ARE) (consensus: 5'-C[CT]TCT[CT]CCTT[AT]-3') but also the amino acid response element (AARE), present in many viral and cellular promoters. Critically involved, often in a cell type-dependent manner, in cell survival, proliferation, and differentiation . Its transcriptional activity is enhanced by CCND3 and slightly inhibited by CDK4 . Important regulator of the cerebral cortex formation, functions in cerebral cortical neuroprogenitor cells to maintain proliferation and to block differentiation into neurons. Must be down-regulated in order for such cells to exit the cycle and differentiate . Participates in the pathways by which SHH promotes cerebellar granule neuron progenitor cells proliferation . Critical for survival of mature olfactory sensory neurons (OSN), directs expression of OSN-specific genes . May be involved in osteogenic differentiation . Promotes cell proliferation and survival by inducing the expression of EGR1 sinergistically with ELK1. Once acetylated by EP300, binds to ARE sequences on target genes promoters, such as BCL2 and EGR1 . Plays an anti-apoptotic role through the transcriptional regulation of BCL2, this function seems to be cell type-dependent . Cooperates with NR1I3/CAR in the transcriptional activation of CYP2B6 in liver . In hepatic cells, represses CRE-dependent transcription and inhibits proliferation by blocking at G2/M phase . May act as a negative regulator of IL1B transduction pathway in liver . Upon IL1B stimulus, cooperates with NLK to activate the transactivation activity of C/EBP subfamily members . Besides its function of transcription factor, acts as a cofactor of CEBPB to activate CEBPA and promote adipocyte differentiation . Regulates centrosome dynamics in a cell-cycle- and centriole-age-dependent manner. Forms 9-foci symmetrical ring scaffold around the mother centriole to control centrosome function and the interaction between centrioles and pericentriolar material .
Cellular Localization	Cytoplasm Nucleus Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Actively transported to the centrosome and accumulated in the pericentriolar material (PCM) during G1 to M phase via a microtubule-dependent mechanism. During late telophase and cytokinesis, translocates from the centrosome to the midbody.
Post-translational Modifications	Ubiquitinated by CDC34 and UBE2B in order to be degraded by the proteasome. Cisplatin inhibits ubiquitination and proteasome-mediated degradation by inhibiting the interaction with CDC34 . Ubiquitination and degradation by the proteasome are inhibited by NLK in a kinase-independent

manner . Phosphorylated by NLK, probably at Ser-92, Thr-94, Ser-126 and Ser-190. Acetylated at Lys-29 by EP300, the acetylation enhances the interaction with CEBPB, DNA-binding and transactivation activity.