

Anti-ATF5 Antibody
Rabbit polyclonal antibody to ATF5
Catalog # AP60225**Specification**

Anti-ATF5 Antibody - Product Information

Application	WB, IH
Primary Accession	O9Y2D1
Other Accession	O70191
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	30674

Anti-ATF5 Antibody - Additional Information**Gene ID** 22809**Other Names**

ATFX; Cyclic AMP-dependent transcription factor ATF-5; cAMP-dependent transcription factor ATF-5; Activating transcription factor 5; Transcription factor ATFX

Target/Specificity

Recognizes endogenous levels of ATF5 protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

IH~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-ATF5 Antibody - Protein Information**Name** ATF5**Synonyms** 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 (PubMed:10373550, PubMed:15358120, PubMed:21212266, PubMed:20654631). Its transcriptional activity is enhanced by CCND3 and slightly inhibited by CDK4 (PubMed:15358120). 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 (By similarity). Participates in the pathways by which SHH promotes cerebellar granule neuron progenitor cells proliferation (By similarity). Critical for survival of mature olfactory sensory neurons (OSN), directs expression of OSN-specific genes (By similarity). May be involved in osteogenic differentiation (PubMed:22442021). Promotes cell proliferation and survival by inducing the expression of EGR1 synergistically with ELK1. Once acetylated by EP300, binds to ARE sequences on target genes promoters, such as BCL2 and EGR1 (PubMed:21791614). Plays an anti- apoptotic role through the transcriptional regulation of BCL2, this function seems to be cell type-dependent (By similarity). Cooperates with NR1I3/CAR in the transcriptional activation of CYP2B6 in liver (PubMed:18332083). In hepatic cells, represses CRE-dependent transcription and inhibits proliferation by blocking at G2/M phase (PubMed:22528486, PubMed:18701499). May act as a negative regulator of IL1B transduction pathway in liver (PubMed:24379400). Upon IL1B stimulus, cooperates with NLK to activate the transactivation activity of C/EBP subfamily members (PubMed:25512613). Besides its function of transcription factor, acts as a cofactor of CEBPB to activate CEBPA and promote adipocyte differentiation (PubMed:24216764). 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 (PubMed:26213385).

Cellular Location

Cytoplasm. Nucleus {ECO:0000255|PROSITE-ProRule:PRU00978, ECO:0000269|PubMed:15358120, ECO:0000269|PubMed:22528486}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome Note=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

Tissue Location

Widely expressed with higher expression levels in liver.

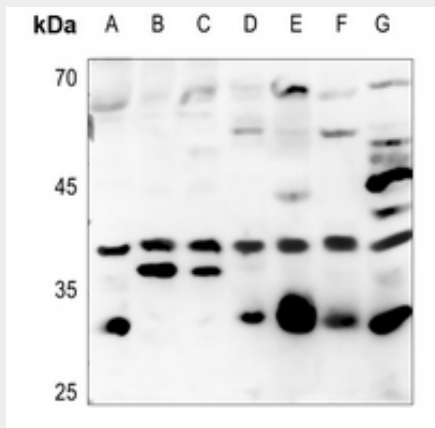
Anti-ATF5 Antibody - Protocols

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

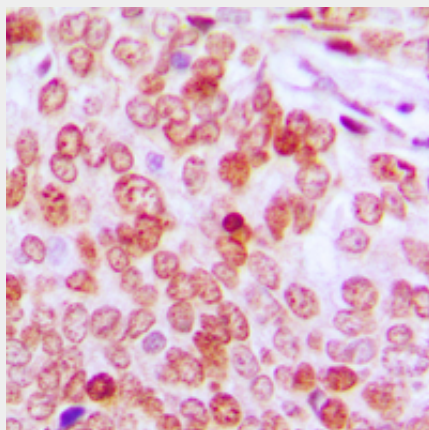
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-ATF5 Antibody - Images



Western blot analysis of ATF5 expression in HEK293T (A), A549 (B), H1688 (C), mouse heart (D), mouse kidney (E), rat heart (F), rat kidney (G) whole cell lysates.



Immunohistochemical analysis of ATF5 staining in human prostate cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-ATF5 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human ATF5. The exact sequence is proprietary.