

Anti-ATF5 Rabbit Monoclonal Antibody

Catalog # ABO13469

Specification

Anti-ATF5 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format Description WB, IHC, IF, ICC, IP <u>O9Y2D1</u> Rabbit Rabbit IgG Rat, Human, Mouse Monoclonal Liquid

Anti-ATF5 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.

Anti-ATF5 Rabbit Monoclonal Antibody - Additional Information

Gene ID 22809

Other Names Cyclic AMP-dependent transcription factor ATF-5, cAMP-dependent transcription factor ATF-5, Activating transcription factor 5, Transcription factor ATFx, ATF5, ATFX

Calculated MW 30674 MW KDa

Application Details WB 1:1000-1:2000
IHC 1:100-1:500
ICC/IF 1:50-1:200
IP 1:50

Subcellular 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..

Tissue Specificity Widely expressed with higher expression levels in liver...

Contents Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human ATF5

Purification Affinity-chromatography



Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-ATF5 Rabbit Monoclonal 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:20654631, PubMed:21212266). 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 sinergistically 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 NR113/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: 18701499, PubMed:22528486). 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 Rabbit Monoclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-ATF5 Rabbit Monoclonal Antibody - Images



Western blot analysis of ATF5 expression in (1) Jurkat cell lysate; (2) 3T3 cell lysate; (2) C6 cell lysate.





All lanes use the Antibody at 1:3K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:3K dilution for 1 hour at room temperature.



Immunohistochemical analysis of paraffin-embedded Human breast, using ATF5 Antibody.





Immunofluorescent analysis using the Antibody at 1:50 dilution.



Immunofluorescent analysis using the Antibody at 1:150 dilution.