

Product datasheet for TA383760

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ATF5 Rabbit Monoclonal Antibody [Clone ID: R06-6G9]

Product data:

Product Type: Primary Antibodies

Clone Name: R06-6G9
Applications: IHC, IP, WB
Recommended Dilution: WB: 1/1000

IHC: 1/20-1/500

IP: 1/20

Reactivity: Human, Mouse, Rat

Host: Rabbit Isotype: IgG

Clonality: Monoclonal

Immunogen: A synthetic peptide of human ATF5

Formulation: 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA

Concentration: lot specific

Purification:Affinity PurifiedConjugation:Unconjugated

Storage: Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Stability: 1 year

Predicted Protein Size: Calculated MW: 31 kDa; Observed MW: 31 kDa

Gene Name: activating transcription factor 5

Database Link: Entrez Gene 22809 Human

Q9Y2D1



Background:

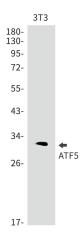
Swiss-Prot Acc.Q9Y2D1.Transcription factor that either stimulates or represses gene transcription through binding of different DNA regulatory elements such as cAMP response element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), ATF5-specific response element (ARE) (consensus: 5'-C[CT]TCT[CT]CCTT[AT]-3') but also the amino acid response element (AARE), present in many viral and cellular promoters. Critically involved, often in a cell typedependent 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. 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 (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. 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).

Synonyms:

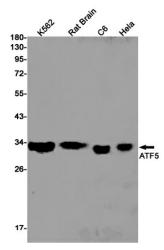
ATFX; FLJ34666; HMFN0395



Product images:

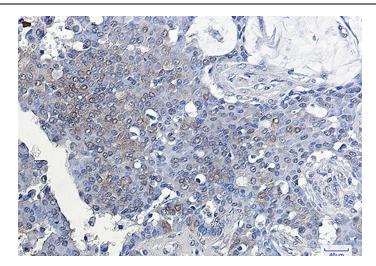


Western blot analysis of ATF5 in 3T3 lysates using ATF5 antibody.



Western blot analysis of ATF5 in K562, rat Brain, C6, Hela lysates using ATF5 antibody.





Immunohistochemistry analysis of paraffinembedded Human breast cancer using ATF5 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.