

Anti-ATF-5 Antibody (5U516)

Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human, Rat
Conjugation:	Unconjugated
Clone:	5U516
Purification:	Affinity-chromatography

Applications

Verified Activity:	<p>1. Western Blot</p> <ul style="list-style-type: none">-Positive WB detected in: Hela whole cell lysate, 293 whole cell lysate, Jurkat whole cell lysate, SH-SY5Y whole cell lysate, THP-1 whole cell lysate, PC-3 whole cell lysate, Rat brain tissue-All lanes: ATF5 antibody at 1:2000-Secondary: Goat polyclonal to rabbit IgG at 1/50000 dilution-Predicted band size: 31 kDa <p>2. IHC image of TMAH-00086 diluted at 1:100 and staining in paraffin-embedded human liver tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.</p>
Application:	ELISA, WB, IHC
Recommended	WB:1:500-1:5000; IHC:1:50-1:200.

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	A synthetic peptide: Human ATF5
Antigen Species:	Human
Gene ID:	22809
Uniprot ID:	Q9Y2D1
Biology Area:	Epigenetics and Nuclear Signaling

Research Background

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 synergistically 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 NR1H3/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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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