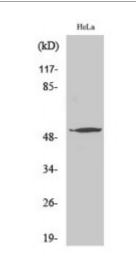


Anti-ATF-7 antibody



4

Description Rabbit polyclonal to ATF-7.

Model STJ91755

Host Rabbit

Reactivity Human, Mouse

Applications ELISA, IF, IHC, WB

Immunogen Synthesized peptide derived from human ATF-7

Immunogen Region 10-90 aa, Internal

Gene ID 11016

Gene Symbol ATF7

Dilution range WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000

Specificity ATF-7 Polyclonal Antibody detects endogenous levels of ATF-7 protein.

Tissue Specificity Expressed in heart, lung and skeletal muscle. Isoform 4 is expressed in various

tissues including heart, brain, placenta, lung and skeletal muscle. Highest

levels in skeletal muscle. Lowest in lung and placenta.

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-7 cAMP-dependent

transcription factor ATF-7 Activating transcription factor 7 Transcription

factor ATF-A

Molecular Weight 52 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:792OMIM:606371

Alternative Names Cyclic AMP-dependent transcription factor ATF-7 cAMP-dependent

transcription factor ATF-7 Activating transcription factor 7 Transcription

factor ATF-A

Function Plays important functions in early cell signaling. Binds the cAMP response

element (CRE) (consensus: 5'-GTGACGT[AG][AG]-3'), a sequence present in many viral and cellular promoters. Activator of the NF-ELAM1/delta-A site of the E-selectin promoter. Has no intrinsic transcriptional activity, but activates transcription on formation of JUN or FOS heterodimers. Also can bind TRE promoter sequences when heterodimerized with members of the JUN family.; Isoform 4 acts as a dominant repressor of the E-selectin/NF-ELAM1/delta-A promoter.; Isoform 5 acts as a negative regulator, inhibiting both ATF2 and ATF7 transcriptional activities. It may exert these effects by

sequestrating in the cytoplasm the Thr-53 phosphorylating kinase, preventing

activation.

Cellular Localization Nucleus Nucleus, nucleoplasm. Mainly nucleoplasmic. Restricted distribution

to the perinuculear region. The sumoylated form locates to the nuclear

periphery.. Isoform 5: Cytoplasm

Post-translational On EGF stimulation, phosphorylated first on Thr-53 allowing subsequent

Modifications phosphorylation on Thr-51. This latter phosphorylation prevents sumoylation,

increases binding to TAF12 and enhances transcriptional activity.

Sumoylation delays nuclear localization and inhibits transactivation activity through preventing binding to TAF12. RANBP2 appears to be the specific E3

ligase.

St John's Laboratory Ltd

F +44 (0)207 681 2580

T +44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com