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NFAT5 Polyclonal Antibody

Catalog # AP74036

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	O94916
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	165763

Additional Information

Gene ID	10725
Other Names	Nuclear factor of activated T-cells 5 (NF-AT5) (T-cell transcription factor NFAT5) (Tonicity-responsive enhancer-binding protein) (TonE-binding protein) (TonEBP)
Dilution	WB~~WB 1:500-2000,IHC-p 1:500-200, ELISA 1:10000-20000 IHC-P~~WB 1:500-2000,IHC-p 1:500-200, ELISA 1:10000-20000 IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

Name	NFAT5 {ECO:0000303|PubMed:10377394, ECO:0000312|HGNC:HGNC:7774}
Function	Transcription factor involved, among others, in the transcriptional regulation of osmoprotective and inflammatory genes (PubMed:10377394, PubMed:11485737, PubMed:41652173). Binds the DNA consensus sequence 5'- [ACT][AG]TGGAAA[CAT]A[TA][ATC][CA][ATG][GT][GAC][CG][CT]-3' (PubMed:10377394, PubMed:11485737). Mediates the transcriptional response to hypertonicity (PubMed:10051678). Positively regulates the transcription of LCN2 and S100A4 genes; optimal transactivation of these genes requires the presence of DDX5/DDX17 (PubMed:22266867). Also involved in the DNA damage response by preventing formation of R-loops; R-loops are composed of a DNA:RNA hybrid and the associated non- template single-stranded DNA (PubMed:34049076).
Cellular Location	Nucleus. Cytoplasm {ECO:0000250|UniProtKB:Q9WV30}. Chromosome. Note=Nuclear distribution increases under hypertonic conditions (By similarity). Recruited to sites of R- loop-associated DNA damage following

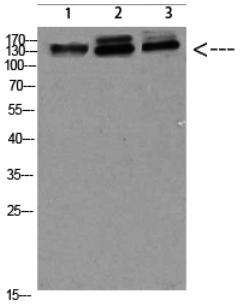
poly-ADP-ribosylation by PARP1 (PubMed:34049076). {ECO:0000250|UniProtKB:Q9WV30, ECO:0000269|PubMed:34049076}

Tissue Location Widely expressed, with highest levels in skeletal muscle, brain, heart and peripheral blood leukocytes

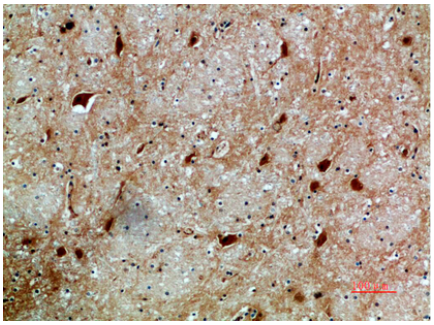
Background

Transcription factor involved, among others, in the transcriptional regulation of osmoprotective and inflammatory genes. Mediates the transcriptional response to hypertonicity (PubMed:10051678). Positively regulates the transcription of LCN2 and S100A4 genes; optimal transactivation of these genes requires the presence of DDX5/DDX17 (PubMed:22266867). Binds the DNA consensus sequence 5'-[ACT][AG]TGGAAA[CAT]A[TA][ATC][CA][ATG][GT][GAC][CG][CT]-3' (PubMed:10377394).

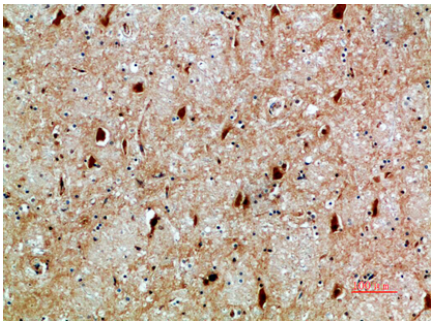
Images



Western blot analysis of 823 293T-UV HELA Cell Lysate, antibody was diluted at 1:1000. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:200



Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:200

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.