

# ELAVL1 Antibody

Mouse Monoclonal Antibody (Mab) Catalog # AM1899B

# **Product Information**

Application	IF, WB, E
Primary Accession	<u>Q15717</u>
Other Accession	<u>NP_001410.2</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,K
Clone Names	224CT6.5.3
Calculated MW	36092

### **Additional Information**

Gene ID	1994
Other Names	ELAV-like protein 1, Hu-antigen R, HuR, ELAVL1, HUR
Target/Specificity	This ELAVL1 monoclonal antibody is generated from mouse immunized with ELAVL1 recombinant protein.
Dilution	IF~~1:10~50 WB~~1:100~1000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ELAVL1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	ELAVL1
Synonyms	HUR
Function	RNA-binding protein that binds to the 3'-UTR region of mRNAs and increases their stability (PubMed: <u>14517288</u> , PubMed: <u>18285462</u> , PubMed: <u>31358969</u> ). Involved in embryonic stem cell (ESC) differentiation: preferentially binds mRNAs that are not methylated by N6-methyladenosine

	(m6A), stabilizing them, promoting ESC differentiation (By similarity). Has also been shown to be capable of binding to m6A-containing mRNAs and contributes to MYC stability by binding to m6A-containing MYC mRNAs (PubMed: <u>32245947</u> ). Binds to poly-U elements and AU-rich elements (AREs) in the 3'-UTR of target mRNAs (PubMed: <u>14731398</u> , PubMed: <u>17632515</u> , PubMed: <u>18285462</u> , PubMed: <u>23519412</u> , PubMed: <u>8626503</u> ). Binds avidly to the AU-rich element in FOS and IL3/interleukin-3 mRNAs. In the case of the FOS AU-rich element, binds to a core element of 27 nucleotides that contain AUUUA, AUUUUA, and AUUUUUA motifs. Binds preferentially to the 5'-UUUU[AG]UUU-3' motif in vitro (PubMed: <u>8626503</u> ). With ZNF385A, binds the 3'-UTR of p53/TP53 mRNA to control their nuclear export induced by CDKN2A. Hence, may regulate p53/TP53 expression and mediate in part the CDKN2A anti-proliferative activity. May also bind with ZNF385A the CCNB1 mRNA (By similarity). Increases the stability of the leptin mRNA harboring an AU-rich element (ARE) in its 3' UTR (PubMed: <u>29180010</u> ).
Cellular Location	Cytoplasm. Nucleus. Cytoplasm, Stress granule {ECO:0000250 UniProtKB:P70372}. Cytoplasm, P-body. Note=Translocates into the cytoplasm following phosphorylation by MAPKAPK2 (PubMed:14517288). Likewise, phosphorylation by PRKCD promotes translocation from the nucleus into the cytoplasm, where it is associated with free and cytoskeleton-bound polysomes (PubMed:18285462). Localizes to the stress granules in the presence of PLEKHN1 (By similarity). {ECO:0000250 UniProtKB:P70372, ECO:0000269 PubMed:14517288, ECO:0000269 PubMed:18285462}
Tissue Location	Ubiquitous. Detected in brain, liver, thymus and muscle.

## Background

The protein encoded by this gene is a member of the ELAVL protein family. This encoded protein contains 3 RNA-binding domains and binds cis-acting AU-rich elements. It destabilizes mRNAs and thereby regulates gene expression.

## References

Tholanikunnel, B.G., et al. J. Biol. Chem. 285(44):33816-33825(2010) Drury, G.L., et al. J. Biol. Chem. 285(41):31130-31138(2010) Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Raspaglio, G., et al. Cancer Res. 70(14):5891-5900(2010) Ahn, J., et al. Retrovirology 7, 40 (2010) :

#### Images



All lanes : Anti- at 1:1000 dilution Lane 1: 293 whole cell lysate Lane 2: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 36 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Confocal immunofluorescent analysis of ELAVL1 Antibody (Cat#AM1899b) with NCI-H460 cell followed by Alexa Fluor® 488-conjugated goat anti-mouse lgG (green). DAPI was used to stain the cell nuclear (blue).

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