

ELAVL1 / HUR Antibody (clone 4G8)

Mouse Monoclonal Antibody Catalog # ALS13304

Specification

ELAVL1 / HUR Antibody (clone 4G8) - Product Information

Application WB, IF, IHC
Primary Accession
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 36kDa KDa

ELAVL1 / HUR Antibody (clone 4G8) - Additional Information

Gene ID 1994

Other Names

ELAV-like protein 1, Hu-antigen R, HuR, ELAVL1, HUR

Reconstitution & Storage

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions

ELAVL1 / HUR Antibody (clone 4G8) is for research use only and not for use in diagnostic or therapeutic procedures.

ELAVL1 / HUR Antibody (clone 4G8) - Protein Information

Name ELAVL1

Synonyms HUR

Function

RNA-binding protein that binds to the 3'-UTR region of mRNAs and increases their stability (PubMed:14517288, PubMed:18285462, PubMed:31358969, PubMed:31358969, 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:32245947). Binds to poly-U elements and AU-rich elements (AREs) in the 3'-UTR of target mRNAs (PubMed:18285462, PubMed:17632515, PubMed:18285462, PubMed:23519412, PubMed:23519412, PubMed:<a



href="http://www.uniprot.org/citations/14731398" target="_blank">14731398). 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:8626503). 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:29180010).

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

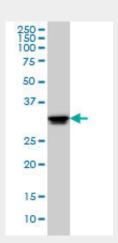
Ubiquitous. Detected in brain, liver, thymus and muscle.

ELAVL1 / HUR Antibody (clone 4G8) - Protocols

Provided below are standard protocols that you may find useful for product applications.

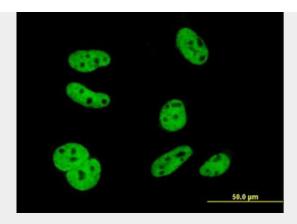
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ELAVL1 / HUR Antibody (clone 4G8) - Images

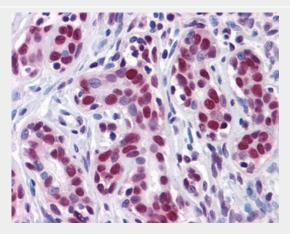


ELAVL1 monoclonal antibody clone 4G8 Western blot of ELAVL1 expression in HeLa.

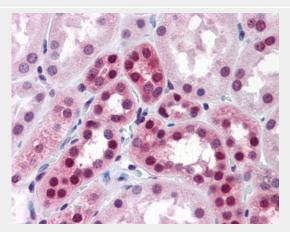




Immunofluorescence of monoclonal antibody to ELAVL1 on HeLa cell (antibody concentration 10 ug/ml).

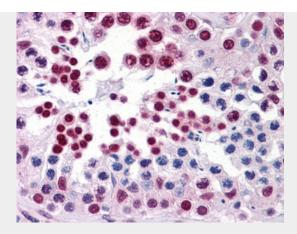


Anti-HuR antibody IHC of human breast.



Anti-HuR antibody IHC of human kidney.





Anti-HuR antibody IHC of human testis.

ELAVL1 / HUR Antibody (clone 4G8) - Background

RNA-binding protein that binds to the 3'-UTR region of mRNAs and increases their stability. Involved in embryonic stem cells (ESCs) differentiation: preferentially binds mRNAs that are not methylated by N6-methyladenosine (m6A), stabilizing them, promoting ESCs differentiation. Binds to poly-U elements and AU- rich elements (AREs) in the 3'-UTR of target mRNAs. 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. 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.

ELAVL1 / HUR Antibody (clone 4G8) - References

Ma W.-J.,et al.J. Biol. Chem. 271:8144-8151(1996). Kalnine N.,et al.Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases. Ota T.,et al.Nat. Genet. 36:40-45(2004). Grimwood J.,et al.Nature 428:529-535(2004). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.