

# HuR (H-280): sc-20694

## BACKGROUND

The elav-like genes encode for a family of RNA-binding proteins. Elav, a *Drosophila* protein and the first described member, is expressed immediately after neuroblastic differentiation into neurons and is necessary for neuronal differentiation and maintenance. Several mammalian elav-like proteins, designated HuC, HuD and Hel-Ni, are also expressed in postmitotic neurons. An additional mammalian homolog, HuR, which is also designated HuA, is ubiquitously expressed and is also overexpressed in a wide variety of tumors. Characteristically, these homologs all contain three RNA recognition motifs (RRM), and they specifically bind to AU-rich elements (ARE) in the 3'-untranslated region of mRNAs transcripts. ARE sites target mRNA for rapid degradation and thereby regulate the expression levels of genes involved in cell growth and differentiation. When elav-like proteins associate with these ARE sites this degradation is inhibited, leading to an increased stability of the corresponding transcript. Proteins function within the nucleus, and they are shuttled between the nucleus and cytoplasm by a nuclear export signal, which is a regulatory feature of the elav-like proteins as it limits their accessibility to ARE sites.

## SOURCE

HuR (H-280) is a rabbit polyclonal antibody raised against amino acids 1-280 mapping at the N-terminus of HuR of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as agarose conjugate for immunoprecipitation, sc-20694 AC, 500 µg/0.25 ml agarose in 1 ml.

## APPLICATIONS

HuR (H-280) is recommended for detection of HuR, HuB, HuC and HuD of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

HuR (H-280) is also recommended for detection of HuR, HuB, HuC and HuD in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of HuR: 36 kDa.

Positive Controls: HuR (h2): 293T Lysate: sc-171115, HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

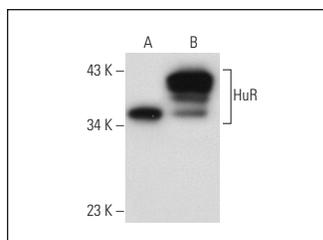
## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

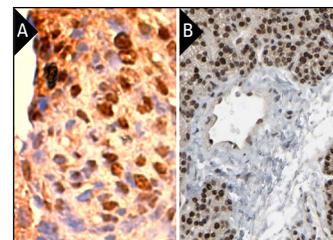
## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## DATA



HuR (H-280): sc-20694. Western blot analysis of HuR expression in non-transfected: sc-117752 (A) and human HuR transfected: sc-171115 (B) 293T whole cell lysates.



HuR (H-280): sc-20694. Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse embryo tissue showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human parathyroid gland tissue showing nuclear staining of glandular cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (B).

## SELECT PRODUCT CITATIONS

- Pan, Y.X., et al. 2005. Interaction of RNA-binding proteins HuR and AUF1 with the human ATF3 mRNA 3'-untranslated region regulates its amino acid limitation-induced stabilization. *J. Biol. Chem.* 280: 34609-34616.
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- Sakuma, T., et al. 2008. Expression of vascular endothelial growth factor-A and mRNA stability factor HuR in human meningiomas. *J. Neurooncol.* 88: 143-155.
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- Cha, J.D., et al. 2011. Association between expression of embryonic lethal abnormal vision-like protein HuR and cyclooxygenase-2 in oral squamous cell carcinoma. *Head Neck* 33: 627-637.



Try **HuR (3A2): sc-5261** or **HuR (G-5): sc-374285**, our highly recommended monoclonal alternatives to HuR (H-280). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **HuR (3A2): sc-5261**.