# SANTA CRUZ BIOTECHNOLOGY, INC.

# HuC (G-15): sc-5981



## 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-N1, are also expressed in post-mitotic 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. Elav 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.

# CHROMOSOMAL LOCATION

Genetic locus: ELAVL3 (human) mapping to 19p13.2; Elavl3 (mouse) mapping to 9 A3.

### SOURCE

HuC (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of HuC of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-5981 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

HuC (G-15) is recommended for detection of HuC of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

HuC (G-15) is also recommended for detection of HuC in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for HuC siRNA (h): sc-37833, HuC siRNA (m): sc-37834, HuC shRNA Plasmid (h): sc-37833-SH, HuC shRNA Plasmid (m): sc-37834-SH, HuC shRNA (h) Lentiviral Particles: sc-37833-V and HuC shRNA (m) Lentiviral Particles: sc-37834-V.

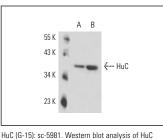
Molecular Weight of HuC: 38 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, T98G cell lysate: sc-2294 or H4 cell lysate: sc-2408.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



expression in H4 (A) and T98G (B) whole cell lysates

#### SELECT PRODUCT CITATIONS

 Akool, el-S., et al. 2003. Nitric oxide increases the decay of matrix metalloproteinase 9 mRNA by inhibiting the expression of mRNA-stabilizing factor HuR. Mol. Cell. Biol. 23: 4901-4916.

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **RESEARCH USE**

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

#### PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try **HuC (D-6): sc-515624**, our highly recommended monoclonal alternative to HuC (G-15).