SANTA CRUZ BIOTECHNOLOGY, INC.

HESL (W-23): sc-133653



BACKGROUND

The Drosophila hairy and Enhancer of split genes encode basic helix-loophelix (bHLH) transcriptional repressors that function in the Notch signaling pathway and control segmentation and neural development during embryogenesis. The Notch signaling pathway is thought to maintain stem cells through transcriptional activation of HES/HEY family members to repress tissue-specific transcription factors. HESL (HES-like), also known as Mgn or HELT (HES/HEY-like transcription factor), is a 327 amino acid nuclear protein belonging to the HEY family. Containing a basic helix-loop-helix (bHLH) domain and an Orange domain, HESL self-associates and interacts with HES5 and HRT2. HESL is considered a transcriptional repressor that binds to the canonical E box sequence 5'-CACGCG-3'. HESL exists as two isoforms produced by alternative splicing events.

REFERENCES

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- 3. Takebayashi, K., et al. 1994. Structure, chromosomal locus and promoter analysis of the gene encoding the mouse helix-loop-helix factor HES1. Negative autoregulation through the multiple N box elements. J. Biol. Chem. 269: 5150-5156.
- 4. Iso, T., et al. 2003. HES and HERP families: multiple effectors of the Notch signaling pathway. J. Cell. Physiol. 194: 237-255.
- 5. Katoh, M., et al. 2004. Identification and characterization of human HESL, rat HESL and rainbow trout HESL genes in silico. Int. J. Mol. Med. 14: 747-751.
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CHROMOSOMAL LOCATION

Genetic locus: HELT (human) mapping to 4q35.1; Helt (mouse) mapping to 8 B1.1.

SOURCE

HESL (W-23) is an affinity purified rabbit polyclonal antibody raised against synthetic HESL peptide of human origin.

PRODUCT

Each vial contains 50 μ g lgG in 500 μ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

HESL (W-23) is recommended for detection of HESL 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for HESL siRNA (h): sc-88997, HESL siRNA (m): sc-145948, HESL shRNA Plasmid (h): sc-88997-SH, HESL shRNA Plasmid (m): sc-145948-SH, HESL shRNA (h) Lentiviral Particles: sc-88997-V and HESL shRNA (m) Lentiviral Particles: sc-145948-V.

Molecular Weight of HESL isoforms: 36/27 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat antirabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ 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).

DATA



HESL (W-23): sc-133653. Western blot analysis of HESL expression in MCF7 whole cell lysate

STORAGE

Store at 4° C, **DO 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.