

# HEN1 (E-13): sc-34643

## BACKGROUND

The helix-loop-helix (HLH) structures are known motifs commonly found in membrane-active and DNA-binding proteins. The helix-loop-helix proteins HEN1 and HEN2 are DNA-binding proteins that may be involved in cell-type determination in the early nervous system. Studies of expression in normal tissues have demonstrated expression of NHLH1/NSCL-1 and NHLH2/NSCL-2, the genes encoding HEN1 and HEN2, in the developing central and peripheral nervous system, specifically in developing neurons.

## REFERENCES

- Begley, C.G., et al. 1991. Molecular cloning and chromosomal localization of the murine homolog of the human helix-loop-helix gene SCL. *Proc. Natl. Acad. Sci. USA* 88: 869-873.
- Begley, C.G., et al. 1992. Molecular characterization of NSCL, a gene encoding a helix-loop-helix protein expressed in the developing nervous system. *Proc. Natl. Acad. Sci. USA* 89: 38-42.
- Gobel, V., et al. 1992. NSCL-2: a basic domain helix-loop-helix gene expressed in early neurogenesis. *Cell Growth Differ.* 3: 143-148.
- Lipkowitz, S., et al. 1992. A comparative structural characterization of the human NSCL-1 and NSCL-2 genes. Two basic helix-loop-helix genes expressed in the developing nervous system. *J. Biol. Chem.* 267: 21065-21071.
- Ibrahim, H.R., et al. 2001. A helix-loop-helix peptide at the upper lip of the active site cleft of lysozyme confers potent antimicrobial activity with membrane permeabilization action. *J. Biol. Chem.* 276: 43767-43774.

## CHROMOSOMAL LOCATION

Genetic locus: NHLH1 (human) mapping to 1q23.2; Nhlh1 (mouse) mapping to 1 H3.

## SOURCE

HEN1 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HEN1 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.

Blocking peptide available for competition studies, sc-34643 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-34643 X, 200 µg/0.1 ml.

## 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.

## APPLICATIONS

HEN1 (E-13) is recommended for detection of HEN1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for HEN1 siRNA (h): sc-45767, HEN1 siRNA (m): sc-45768, HEN1 shRNA Plasmid (h): sc-45767-SH, HEN1 shRNA Plasmid (m): sc-45768-SH, HEN1 shRNA (h) Lentiviral Particles: sc-45767-V and HEN1 shRNA (m) Lentiviral Particles: sc-45768-V.

HEN1 (E-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

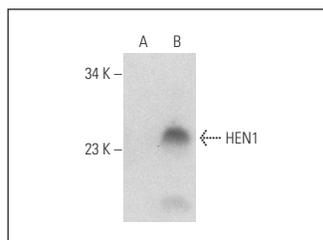
Molecular Weight of HEN1: 20 kDa.

Positive Controls: mouse brain extract: sc-2253 or HEN1 (h2): 293T Lysate: sc-369687.

## 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™ compatible donkey anti-goat IgG-HRP: sc-2033 (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). 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™ Mounting Medium: sc-24941.

## DATA



HEN1 (E-13): sc-34643. Western blot analysis of HEN1 expression in non-transfected: sc-117752 (A) and human HEN1 transfected: sc-369687 (B) 293T whole cell lysates.

## PROTOCOLS

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