

HEN2 (T-12): sc-34648

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

1. 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.
2. 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.
3. Gobel, V., et al. 1992. NSCL-2: a basic domain helix-loop-helix gene expressed in early neurogenesis. Cell Growth Differ. 3: 143-148.
4. 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.
5. 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: NHLH2 (human) mapping to 1p13.1, NHLH1 (human) mapping to 1q23.2; Nhlh2 (mouse) mapping to 3 F2.2, Nhlh1 (mouse) mapping to 1 H3.

SOURCE

HEN2 (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HEN2 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-34648 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-34648 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

HEN2 (T-12) is recommended for detection of HEN2 and HEN1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

HEN2 (T-12) is also recommended for detection of HEN2 and HEN1 in additional species, including canine, bovine, porcine and avian.

HEN2 (T-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of HEN2: 15 kDa.

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) 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.

PROTOCOLS

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