

Hex (L-19): sc-15128

BACKGROUND

The homeobox protein Hex, also known as proline-rich homeodomain protein (Prh), is encoded by a divergent homeobox gene that is transiently expressed in many hematopoietic lineages, suggesting involvement in cellular differentiation. Hex plays a critical role in inducing differentiation of vascular endothelial cells, in the development and maintenance of several organs derived from foregut endoderm, such as the lung, liver and thyroid gland, and in thyroid cell differentiation. Specifically, Hex is expressed in the developmental phases of the thyroid, lung, liver, thymus, gallbladder and pancreas, and in the adult thyroid, lung and liver. Hex also mediates transcriptional induction of the SMemb/NMHC-B gene via its homeodomain and can function as a transcriptional modulator of CRE-dependent transcription in vascular smooth muscle cells (VSMCs). Hex, a soluble protein, is detected in both the nucleus and cytoplasm of transfected and nontransfected cultured cells.

REFERENCES

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3. Martinez, B., Clements, M., Thomas, P., Rodriguez, T., Meloy, D., Kioussis, D. and Beddington, R. 2000. The homeobox gene Hex is required in definitive endodermal tissues for normal forebrain, liver, and thyroid formation. *Development* 11: 2433-2445.
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CHROMOSOMAL LOCATION

Genetic locus: HHEX (human) mapping to 10q23.33; Hhex (mouse) mapping to 19 C2.

SOURCE

Hex (L-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Hex of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-15128 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-15128 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Hex (L-19) is recommended for detection of Hex 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).

Hex (L-19) is also recommended for detection of Hex in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Hex siRNA (h): sc-43831, Hex siRNA (m): sc-61862, Hex shRNA Plasmid (h): sc-43831-SH, Hex shRNA Plasmid (m): sc-61862-SH, Hex shRNA (h) Lentiviral Particles: sc-43831-V and Hex shRNA (m) Lentiviral Particles: sc-61862-V.

Hex (L-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Hex: 34 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.

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.



Try **Hex (HHE5I261): sc-81284**, our highly recommended monoclonal alternative to Hex (L-19).