

GBX1 (N-13): sc-22227

BACKGROUND

The homeobox is DNA sequence that is approximately 180 base pairs long that is involved in all steps of the developmental regulation of animals, fungi and plants, from embryogenesis to cell differentiation. The homeobox encodes a protein domain of about 60 amino acids, called the homeodomain, that can bind to DNA. The gastrulation brain homeobox 1 (GBX1) gene, along with another homeobox gene (EN2), maps to chromosome 7q36.1, and is expressed in septal and pallidal areas and in the basal forebrain cholinergic system, an area implicated in Alzheimer's disease. The GBX1 gene encodes the GBX1 protein, which localizes to the nucleus and contains 1 homeobox DNA-binding domain.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GBX1 (human) mapping to 7q36.1; Gbx1 (mouse) mapping to 5 A3.

SOURCE

GBX1 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GBX1 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-22227 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

GBX1 (N-13) is recommended for detection of GBX1 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).

GBX1 (N-13) is also recommended for detection of GBX1 in additional species, including equine and porcine.

Suitable for use as control antibody for GBX1 siRNA (h): sc-38663, GBX1 siRNA (m): sc-38664, GBX1 shRNA Plasmid (h): sc-38663-SH, GBX1 shRNA Plasmid (m): sc-38664-SH, GBX1 shRNA (h) Lentiviral Particles: sc-38663-V and GBX1 shRNA (m) Lentiviral Particles: sc-38664-V.

Molecular Weight of GBX1: 38-40 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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.

STORAGE

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

PROTOCOLS

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