

HRT2 (A-20): sc-16446

BACKGROUND

The LIN-12/Notch family of transmembrane receptors plays a central role in development by regulating cell fate and establishing boundaries of gene expression. Notch signaling activates the hairy/enhancer of split (HES) genes, which encode basic helix-loop-helix (bHLH) transcriptional repressors that are critical for directing embryonic patterning and development. The hairy-related transcription factors (HRTs) comprise a subclass of bHLH proteins that exhibit structural similarity with the HES proteins and include HRT1, HRT2 and HRT3. The HRT family (also designated Hesr, Hey, CHF and gridlock) contain a bHLH domain, an orange domain and a novel YRPW domain, which is absent in HRT3. The Hairy-related genes map to human chromosomes 8q21, 6q22.31 and 1p34.3 for HRT1, HRT2 and HRT3, respectively, and are downstream targets for Notch signaling. HRT1 is expressed in the somitic mesoderm, central nervous system, kidney, heart, nasal epithelium and limb buds in murine embryos as well as in adult tissues. It has altered expression in many breast, lung and kidney tumors. Like HRT1, HRT2 and HRT3 are also expressed in developing somites, heart and nervous system.

CHROMOSOMAL LOCATION

Genetic locus: HEY2 (human) mapping to 6q22.31; Hey2 (mouse) mapping to 10 A4.

SOURCE

HRT2 (A-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HRT2 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-16446 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-16446 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HRT2 (A-20) is recommended for detection of HRT2 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).

HRT2 (A-20) is also recommended for detection of HRT2 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for HRT2 siRNA (h): sc-37916, HRT2 siRNA (m): sc-37917, HRT2 shRNA Plasmid (h): sc-37916-SH, HRT2 shRNA Plasmid (m): sc-37917-SH, HRT2 shRNA (h) Lentiviral Particles: sc-37916-V and HRT2 shRNA (m) Lentiviral Particles: sc-37917-V.

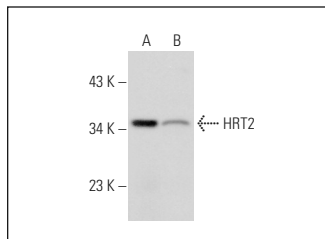
HRT2 (A-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Positive Controls: human testis extract: sc-363781 or Hep G2 nuclear extract: sc-364819.

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



HRT2 (A-20): sc-16446. Western blot analysis of HRT2 expression in human testis tissue extract (A) and Hep G2 nuclear extract (B).

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.

MONOS
Satisfaction
Guaranteed

Try **HRT2 (2B10): sc-293301**, our highly recommended monoclonal alternative to HRT2 (A-20).