RREB1 (S-12): sc-138057



The Power to Question

BACKGROUND

RREB1 (ras responsive element binding protein 1), also known as FINB, LZ321 or Zep-1, is a 1,687 amino acid protein that localizes to nuclear speckles and contains 15 C_2H_2 -type zinc fingers. Expressed in pancreas, heart, liver, placenta, lung, kidney and skeletal muscle, RREB1 functions as a transcription factor that binds to the RAS-responsive element (RRE) of target gene promotors, thereby inducing their transcription. In addition, RREB1 is thought to be involved in Raf/Ras-mediated cell differentiation, possibly by enhancing the expression of Calcitonin, a hormone that is produced by the thyroid gland and plays an essential role in maintaining blood calcium levels. Due to its involvement in cell differentiation events, RREB1 may be involved in Raf/Ras-related tumor formation. Four isoforms of RREB1 exist due to alternative splicing.

REFERENCES

- Carson, E.B., et al. 1995. Ret gene silencing is associated with Raf-1induced medullary thyroid carcinoma cell differentiation. Cancer Res. 55: 2048-2052.
- Thiagalingam, A., et al. 1996. RREB1, a novel zinc finger protein, is involved in the differentiation response to Ras in human medullary thyroid carcinomas. Mol. Cell. Biol. 16: 5335-5345.
- Fujimoto-Nishiyama, A., et al. 1997. A novel zinc finger protein, Finb, is a transcriptional activator and localized in nuclear bodies. Gene 195: 267-275.
- 4. Thiagalingam, A., et al. 1997. RREB1, a Ras responsive element binding protein, maps to human chromosome 6p25. Genomics 45: 630-632.
- Zhang, L., et al. 1999. A human Raf-responsive zinc-finger protein that binds to divergent sequences. Nucleic Acids Res. 27: 2947-2956.
- 6. Ray, S.K., et al. 2003. Novel transcriptional potentiation of BETA2/NeuroD on the secretin gene promoter by the DNA-binding protein Finb/RREB1. Mol. Cell. Biol. 23: 259-271.

CHROMOSOMAL LOCATION

Genetic locus: RREB1 (human) mapping to 6p24.3; Rreb1 (mouse) mapping to 13 A3.3.

SOURCE

RREB1 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RREB1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138057 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

RREB1 (S-12) is recommended for detection of RREB1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 RREB1 siRNA (h): sc-95379, RREB1 siRNA (m): sc-153127, RREB1 shRNA Plasmid (h): sc-95379-SH, RREB1 shRNA Plasmid (m): sc-153127-SH, RREB1 shRNA (h) Lentiviral Particles: sc-95379-V and RREB1 shRNA (m) Lentiviral Particles: sc-153127-V.

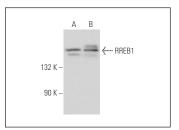
Molecular Weight of RREB1: 181 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, KNRK whole cell lysate: sc-2214 or HEK293 whole cell lysate: sc-45136.

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



RREB1 (S-12): sc-138057. Western blot analysis of RREB1 expression in HeLa (**A**) and HEK293 (**B**) whole cell lycates

RESEARCH USE

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



Try **RREB1 (B-7): sc-515600**, our highly recommended monoclonal alternative to RREB1 (S-12).

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