SANTA CRUZ BIOTECHNOLOGY, INC.

cortexin 1 (C-14): sc-242505

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Cortexin 1, also known as CTXN or CTXN1, is an 82 amino acid single-pass membrane protein that may involved in mediating extracellular or intracellular signaling of cortical neurons during forebrain development. Cortexin 1 is encoded by a gene located on human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (FcRs). Key genes for eye color and hair color also map to chromosome 19.

REFERENCES

1. Watson, J.B., et al. 1994. Mouse chromosomal localization of the cortexin (Ctxn) gene. Genomics 22: 251-252.
2. Horvath, D.H., et al. 1996. Probable exclusion of the cortexin-encoding gene as a candidate for mouse neurological mutants: nervous, tottering and motor neuron degeneration. Gene 171: 305-306.
3. Trettel, F., et al. 2000. A fine physical map of the CACNA1A gene region on 19p13.1-p13.2 chromosome. Gene 241: 45-50.
4. Grimwood, J., et al. 2004. The DNA sequence and biology of human chromosome 19. Nature 428: 529-535.
5. Shabanov, P.D., et al. 2007. Comparison of behavioral effects of cortexin and cerebrolysin injected into brain ventricles. Bull. Exp. Biol. Med. 143: 437-441.
6. Shabanov, P.D., et al. 2007. Comparative study of behavioral effects of cortexin and cerebrolysine upon intraventricular and intraperitoneal administration in rats. Eksp. Klin. Farmakol. 70: 13-19.

CHROMOSOMAL LOCATION

Genetic locus: CTXN1 (human) mapping to 19p13.2; Ctxn1 (mouse) mapping to 8 A1.1.

SOURCE

cortexin 1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of cortexin 1 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-242505 P, (100 µg 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.

RESEARCH USE

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

APPLICATIONS

cortexin 1 (C-14) is recommended for detection of cortexin 1 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).

cortexin 1 (C-14) is also recommended for detection of cortexin 1 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for cortexin 1 siRNA (h): sc-97233, cortexin 1 siRNA (m): sc-142521, cortexin 1 shRNA Plasmid (h): sc-97233-SH, cortexin 1 shRNA Plasmid (m): sc-142521-SH, cortexin 1 shRNA (h) Lentiviral Particles: sc-97233-V and cortexin 1 shRNA (m) Lentiviral Particles: sc-142521-V.

Molecular Weight of cortexin 1: 9 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.