

cortistatin (H-147): sc-68889

BACKGROUND

Cortistatin is a 155 amino acid protein encoded by the human gene CORT. This product of the CORT gene is a neuropeptide with strong structural similarity to somatostatin. It binds to all known somatostatin receptors, and shares many pharmacological and functional properties with somatostatin, including the depression of neuronal activity. However, cortistatin also has many properties distinct from somatostatin, such as induction of slow-wave sleep, apparently by antagonism of the excitatory effects of acetylcholine on the cortex, reduction of locomotor activity, and activation of cation selective currents not responsive to somatostatin.

REFERENCES

1. Fukusumi, S., Kitada, C., Takekawa, S., Kizawa, H., Sakamoto, J., Miyamoto, M., Hinuma, S., Kitano, K. and Fujino, M. 1997. Identification and characterization of a novel human cortistatin-like peptide. *Biochem. Biophys. Res. Commun.* 232: 157-163.
2. de Lecea, L., Ruiz-Lozano, P., Danielson, P.E., Peelle-Kirley, J., Foye, P.E., Frankel, W.N. and Sutcliffe, J.G. 1997. Cloning, mRNA expression, and chromosomal mapping of mouse and human preprocortistatin. *Genomics* 42: 499-506.
3. Puebla, L., Mouchantaf, R., Sasi, R., Khare, S., Bennett, H.P., James, S. and Patel, Y.C. 1999. Processing of rat preprocortistatin in mouse AtT-20 cells. *J. Neurochem.* 73: 1273-1277.
4. Ejeskär, K., Abel, F., Sjöberg, R., Bäckström, J., Kogner, P. and Martinsson, T. 2000. Fine mapping of the human preprocortistatin gene (CORT) to neuroblastoma consensus deletion region 1p36.3→p36.2, but absence of mutations in primary tumors. *Cytogenet. Cell Genet.* 89: 62-66.
5. Spier, A.D. and de Lecea, L. 2001. Cortistatin: a member of the somatostatin neuropeptide family with distinct physiological functions. *Brain Res. Brain Res. Rev.* 33: 228-241.
6. Dalm, V.A., van Hagen, P.M., van Koetsveld, P.M., Achilefu, S., Houtsmuller, A.B., Pols, D.H., van der Lely, A.J., Lamberts, S.W. and Hofland, L.J. 2003. Expression of somatostatin, cortistatin, and somatostatin receptors in human monocytes, macrophages, and dendritic cells. *Am. J. Physiol. Endocrinol. Metab.* 285: E344-E353.
7. Clark, H.F., Gurney, A.L., Abaya, E., Baker, K., Baldwin, D., Brush, J., Chen, J., Chow, B., Chui, C., Crowley, C., Currell, B., Goddard, A., Wood, W.I., Godowski, P. and Gray, A. 2003. The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: a bioinformatics assessment. *Genome Res.* 13: 2265-2270.

CHROMOSOMAL LOCATION

Genetic locus: CORT (human) mapping to 1p36.22.

SOURCE

cortistatin (H-147) is a rabbit polyclonal antibody raised against amino acids 1-147 mapping at the N-terminus of cortistatin 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.

APPLICATIONS

cortistatin (H-147) is recommended for detection of cortistatin of 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).

Suitable for use as control antibody for cortistatin siRNA (h): sc-39726, cortistatin shRNA Plasmid (h): sc-39726-SH and cortistatin shRNA (h) Lentiviral Particles: sc-39726-V.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.

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 **cortistatin (A-7): sc-393108** or **cortistatin (H-3): sc-393107**, our highly recommended monoclonal alternatives to cortistatin (H-147).