INSL5 (D-19): sc-50574



The Power to Question

BACKGROUND

Insulin gene superfamily hormones modulate metabolism, cell growth and tissue-specific functions. Members of this superfamily are characterized by a signal peptide, a B chain, a connecting C chain and an A chain. Insulin-like peptides (INSL proteins), also designated Relaxin-like factors, are mostly secreted proteins that are expressed mainly in testis, placenta, uterus or prenatal tissues. The deduced 135 amino acid INSL5 protein, which shares 40% and 59% sequence homology with human RLN1 and mouse INSL5, respectively, contains a dibasic cleavage site between the B and C chains. INSL5 exists as a heterodimer of a B chain and an A chain which are linked by two disulfide bonds. INSL5 is thought to play a role in gut contractility or in thymic development and regulation, as it demonstrates predominant expression in the rectum, and intermediate expression in the uterus and ascending and descending colon.

REFERENCES

- Conklin, D., Lofton-Day, C.E., Haldeman, B.A., Ching, A., Whitmore, T.E., Lok, S. and Jaspers, S. 1999. Identification of INSL5, a new member of the insulin superfamily. Genomics 60: 50-56.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606413. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Liu, C., Bonaventure, P., Sutton, S.W., Chen, J., Kuei, C., Nepomuceno, D. and Lovenberg, T.W. 2005. Recent progress in Relaxin-3-related research. Annu. N.Y. Acad. Sci. 1041: 47-60.
- Hsu, S.Y., Semyonov, J., Park, J.I. and Chang, C.L. 2005. Evolution of the signaling system in Relaxin-family peptides. Annu. N.Y. Acad. Sci. 1041: 520-529.
- Liu, C., Kuei, C., Sutton, S., Chen, J., Bonaventure, P., Wu, J., Nepomuceno, D., Kamme, F., Tran, D.T., Zhu, J., Wilkinson, T., Bathgate, R., Eriste, E., Sillard, R. and Lovenberg, T.W. 2005. INSL5 is a high affinity specific agonist for GPCR142 (GPR100). J. Biol. Chem. 280: 292-300.
- 6. Wilkinson, T.N., Speed, T.P., Tregear, G.W. and Bathgate, R.A. 2005. Evolution of the Relaxin-like peptide family. BMC Evol. Biol. 5: 14.
- Wilkinson, T.N., Speed, T.P., Tregear, G.W. and Bathgate, R.A. 2005. Evolution of the Relaxin-like peptide family: from neuropeptide to reproduction. Annu. N.Y. Acad. Sci. 1041: 530-533.

CHROMOSOMAL LOCATION

Genetic locus: INSL5 (human) mapping to 1p31.3.

SOURCE

INSL5 (D-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of INSL5 of human origin.

STORAGE

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

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-50574 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

INSL5 (D-19) is recommended for detection of INSL5 precursor and A chain of 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).

INSL5 (D-19) is also recommended for detection of INSL5 precursor and A chain in additional species, including equine.

Suitable for use as control antibody for INSL5 siRNA (h): sc-60857, INSL5 shRNA Plasmid (h): sc-60857-SH and INSL5 shRNA (h) Lentiviral Particles: sc-60857-V.

Molecular Weight of INSL5: 16 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) with UltraCruz™ Mounting Medium: sc-24941.

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 INSL5 (A-12): sc-166804, our highly recommended monoclonal alternative to INSL5 (D-19).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**