SANTA CRUZ BIOTECHNOLOGY, INC.

INSL5 (m): 293T Lysate: sc-125496

BACKGROUND

INSL5 (Insulin-like peptide INSL5, relaxin/Insulin-like protein) is a 135 amino acid protein encoded by the human gene INSL5. The 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. INSL proteins are mostly secreted proteins that are expressed mainly in testes, placenta, uterus or prenatal tissues. INSL5 shares 40% and 59% sequence homology with human RLN1 and mouse Insl5, respectively, and 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

1. Conklin, D., et al. 1999. Identification of INSL5, a new member of the Insulin superfamily. Genomics 60: 50-56.
2. 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/
3. Liu, C., et al. 2005. Recent progress in Relaxin 3-related research. Ann. N.Y. Acad. Sci. 1041: 47-60.
4. Hsu, S.Y., et al. 2005. Evolution of the signaling system in relaxin-family peptides. Ann. N.Y. Acad. Sci. 1041: 520-529.
5. Wilkinson, T.N., et al. 2005. Evolution of the relaxin-like peptide family: from neuropeptide to reproduction. Ann. N.Y. Acad. Sci. 1041: 530-533.
6. Liu, C., et al. 2005. INSL5 is a high affinity specific agonist for GPCR142 (GPR100). J. Biol. Chem. 280: 292-300.
7. Wilkinson, T.N., et al. 2005. Evolution of the relaxin-like peptide family. BMC Evol. Biol. 5: 14.

CHROMOSOMAL LOCATION

Genetic locus: Insl5 (mouse) mapping to 4 C6.

PRODUCT

INSL5 (m): 293T Lysate represents a lysate of mouse INSL5 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

INSL5 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive INSL5 antibodies. Recommended use: 10-20 µl per lane.

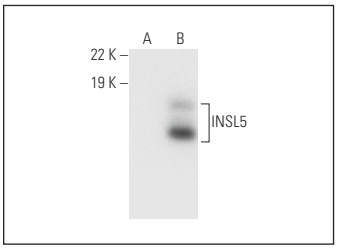
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

INSL5 (G-12): sc-398048 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse INSL5 expression in INSL5 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



INSL5 (G-12): sc-398048. Western blot analysis of INSL5 expression in non-transfected: sc-117752 (**A**) and mouse INSL5 transfected: sc-125496 (**B**) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.