

INSL5 (G-12): sc-398048

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. 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. INSL5 shares 40% and 59% sequence homology with human RLN1 and mouse *Ins5*, 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

- Conklin, D., et al. 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., et al. 2005. Recent progress in relaxin 3-related research. *Ann. N.Y. Acad. Sci.* 1041: 47-60.
- Hsu, S.Y., et al. 2005. Evolution of the signaling system in relaxin-family peptides. *Ann. N.Y. Acad. Sci.* 1041: 520-529.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: *Ins5* (mouse) mapping to 4 C6.

SOURCE

INSL5 (G-12) is a mouse monoclonal antibody raised against amino acids 1-135 representing full length INSL5 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

INSL5 (G-12) is available conjugated to agarose (sc-398048 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398048 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398048 PE), fluorescein (sc-398048 FITC), Alexa Fluor® 488 (sc-398048 AF488), Alexa Fluor® 546 (sc-398048 AF546), Alexa Fluor® 594 (sc-398048 AF594) or Alexa Fluor® 647 (sc-398048 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398048 AF680) or Alexa Fluor® 790 (sc-398048 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

INSL5 (G-12) is recommended for detection of INSL5 precursor, A chain and B chain of mouse origin by Western Blotting (starting dilution 1:100, 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 INSL5 siRNA (m): sc-60858, INSL5 shRNA Plasmid (m): sc-60858-SH and INSL5 shRNA (m) Lentiviral Particles: sc-60858-V.

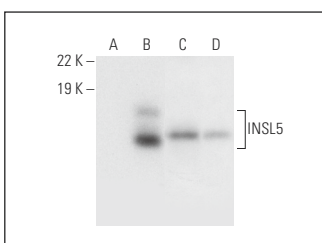
Molecular Weight of INSL5: 16 kDa.

Positive Controls: INSL5 (m): 293T Lysate: sc-125496, mouse colon extract: sc-364238 or mouse testis extract: sc-2405.

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

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 and mouse colon (C) and mouse testis (D) tissue extracts.

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 for detailed protocols and support products.