

# INSL5 (A-12): sc-166804

## 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 testis, 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

INSL5 (A-12) is a mouse monoclonal antibody raised against amino acids 26-135 mapping at the C-terminus of INSL5 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

INSL5 (A-12) is available conjugated to agarose (sc-166804 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166804 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166804 PE), fluorescein (sc-166804 FITC), Alexa Fluor® 488 (sc-166804 AF488), Alexa Fluor® 546 (sc-166804 AF546), Alexa Fluor® 594 (sc-166804 AF594) or Alexa Fluor® 647 (sc-166804 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166804 AF680) or Alexa Fluor® 790 (sc-166804 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

INSL5 (A-12) is recommended for detection of INSL5 precursor, A chain and B chain of human 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).

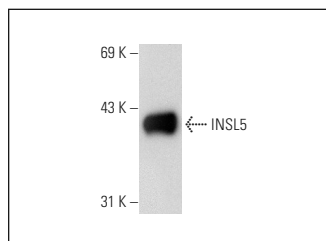
Suitable for use as control antibody for INSL5 siRNA (h): sc-60857, INSL5 shRNA Plasmid (h): sc-60857-SH and INSL5 shRNA (h) Lentiviral Particles: sc-60857-V.

Molecular Weight of INSL5: 16 kDa.

## RECOMMENDED 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 (A-12): sc-166804. Western blot analysis of full length human recombinant INSL5.

## 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](http://www.scbt.com) for detailed protocols and support products.