

# INSL5 (M-135): sc-67191

## 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 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

- Conklin, D., et al. 1999. Identification of INSL5, a new member of the Insulin superfamily. *Genomics* 60: 50-56.
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- Wilkinson, T.N., et al. 2005. Evolution of the Relaxin-like peptide family. *BMC Evol. Biol.* 5: 14.
- Liu, C., et al. 2005. INSL5 is a high affinity specific agonist for GPCR142 (GPR100). *J. Biol. Chem.* 280: 292-300.
- 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: Insl5 (mouse) mapping to 4 C6.

## SOURCE

INSL5 (M-135) is a rabbit polyclonal antibody raised against amino acids 1-135 representing full length INSL5 of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

INSL5 (M-135) is recommended for detection of INSL5 precursor, A chain and B chain of mouse and rat 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 INSL5 siRNA (m): sc-60858, INSL5 shRNA Plasmid (m): sc-60858-SH and INSL5 shRNA (m) Lentiviral Particles: sc-60858-V.

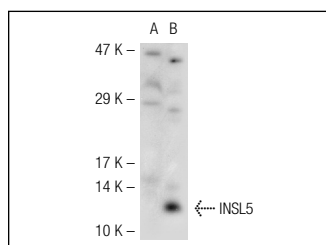
Molecular Weight of INSL5: 16 kDa.

Positive Controls: INSL5 (m): 293T Lysate: sc-125496.

## 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.

## DATA



INSL5 (M-135): sc-67191. Western blot analysis of INSL5 expression in non-transfected: sc-117752 (A) and mouse INSL5 transfected: sc-125496 (B) 293T whole cell lysates.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

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Try **INSL5 (G-12): sc-398048**, our highly recommended monoclonal alternative to INSL5 (M-135).