

# Product Datasheet

## INSL5 Antibody - BSA Free

### NBP1-86343

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

[www.novusbio.com](http://www.novusbio.com)



[technical@novusbio.com](mailto:technical@novusbio.com)

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Updated 2/22/2026 v.20.1

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**NBP1-86343**

INSL5 Antibody - BSA Free

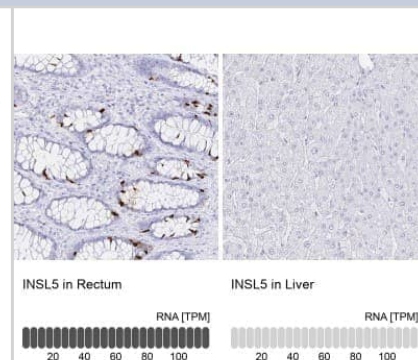
Product Information	
Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Affinity purified
Buffer	PBS (pH 7.2) and 40% Glycerol

Product Description	
Description	Novus Biologicals Rabbit INSL5 Antibody - BSA Free (NBP1-86343) is a polyclonal antibody validated for use in IHC and WB. Anti-INSL5 Antibody: Cited in 1 publication. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	10022
Gene Symbol	INSL5
Species	Human
Immunogen	This antibody was developed against Recombinant Protein corresponding to amino acids: LEYIRTVIYICASSRWRRHLEGIPQAQQAETGNSFQLPHKREFSEENPAQNLPK VDASGEDRLWGGQMPTEELWKSCKKHSVMSR

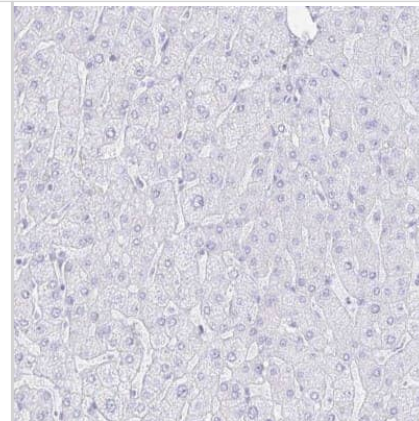
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Immunohistochemistry
Recommended Dilutions	Western Blot 0.04-0.4 ug/ml, Immunohistochemistry 1:50 - 1:200, Immunohistochemistry-Paraffin 1:50 - 1:200
Application Notes	IHC-Paraffin, HIER pH 6 retrieval is recommended.

**Images**

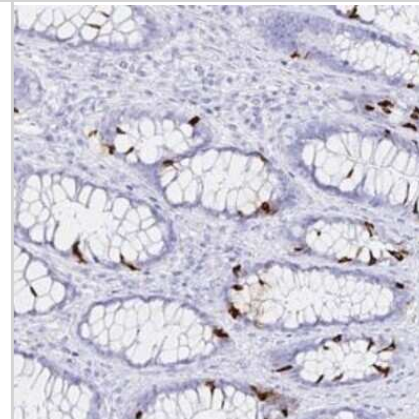
Immunohistochemistry-Paraffin: INSL5 Antibody [NBP1-86343] - Staining in human rectum and liver tissues using anti-INSL5 antibody. Corresponding INSL5 RNA-seq data are presented for the same tissues.



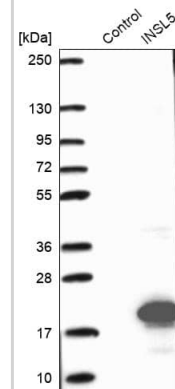
Immunohistochemistry-Paraffin: INSL5 Antibody [NBP1-86343] - Staining of human liver shows low expression as expected.



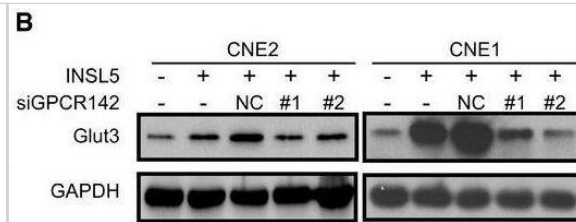
Immunohistochemistry-Paraffin: INSL5 Antibody [NBP1-86343] - Staining of human rectum shows high expression.



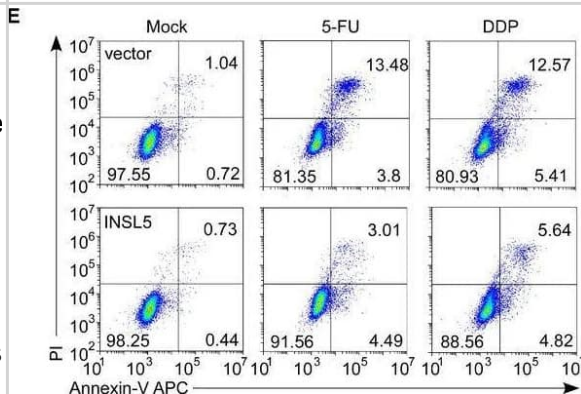
Analysis in control (vector only transfected HEK293T lysate) and INSL5 over-expression lysate (Co-expressed with a C-terminal myc-DDK tag (~3.1 kDa) in mammalian HEK293T cells).



INSL5 induces glucose metabolism to aerobic glycolysis reprogramming in NPC cells. **A** Analysis of glycolytic gene expression by qRT-PCR in INSL5 overexpressed CNE1 cell lines. **B** Analysis of glycolytic gene expression by immunoblot in INSL5 overexpressing cells with or without GPCR142 knockdown. **C–E** The metabolomics identified increased glycolytic intermediate metabolites in INSL5 overexpressed CNE1 cells (C), CNE2 cells (D), and HK1 cells (E). CNE1 and HK1 were from five independent samples, and CNE2 were from seven independent samples. **F** Schematic diagram of aerobic glycolysis pathway and TCA pathway. Red: INSL5 upregulated glycolytic genes and metabolites. Green: INSL5 downregulated TCA intermediates. **G** The extracellular acidification rate (ECAR) was measured in cells with or without INSL5 overexpression using a Seahorse XF96 Extracellular Flux analyzer. **H** The oxygen consumption rate (OCR) was measured in cells with or without INSL5 overexpression using a Seahorse XF96 Extracellular Flux analyzer. **I–L** Glucose uptake (I), HK2 enzyme activity (J), ATP concentration (K), and lactate production (L) in CNE2 and HK1 stable cells. **M** Glucose uptake in CNE2 wide type or GPCR142 knockdown cells stimulated with INSL5 peptide (50 ng/ml) for 24 h. **N** ATP concentration, HK2 enzyme activity, and lactate production in INSL5 wide type or knockdown CNE2 EBV cells. Data information: In (G–I, M and N), data are presented as mean  $\pm$  SEM, in (C–E and J–L), data are presented as mean  $\pm$  SD, from three different experiments, and P values were determined by unpaired t test. \*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.001, ns, no significance. Exact P values are specified in Appendix Table S4. Source data are available online for this figure. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/32657028>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

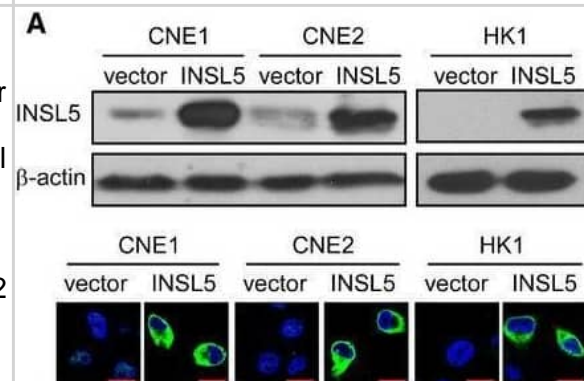
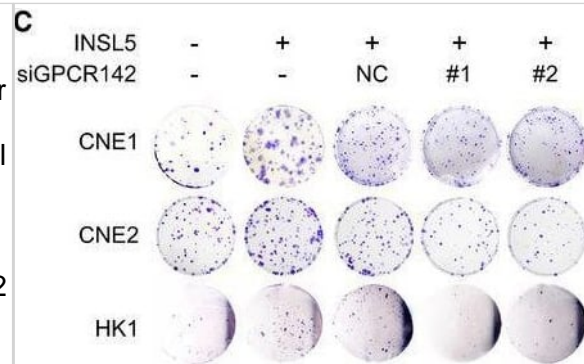


Overexpression of INSL5 promotes cell cycle progression and suppresses cell apoptosis. **A** The cell cycle of vector control or INSL5 overexpressing CNE1, CNE2, and HK1 cells were analyzed by flow cytometry assay. **B** Statistical analysis of cell percentage in each cell cycle phase. **C** Cyclin D, cyclin E, cyclin B, and p27 expression levels were detected by Western blotting in cells with or without INSL5 overexpression. **D** Western blotting for c-myc, BCL2, and BCL2xL in CNE1, CNE2, and HK1 with or without INSL5 overexpression. **E** CNE1 stable cell line was treated with DDP or 5-FU and stained with annexin V/propidium iodide (PI), and measured by flow cytometry. Data shown are representative of three independent experiments. **F** Statistical analysis of the effects of INSL5 overexpression on cell apoptosis under DDP or 5-FU treatment. **G** Western blotting for apoptosis pathway in CNE1, CNE2, and HK1 with or without INSL5 overexpression under 5-FU treatment. Data information: In (F), data are presented as mean  $\pm$  SEM, from three different experiments, and P values were determined by unpaired t test. \*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.001, ns, no significance. Exact P values are specified in Appendix Table S4. Source data are available online for this figure. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/32657028>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

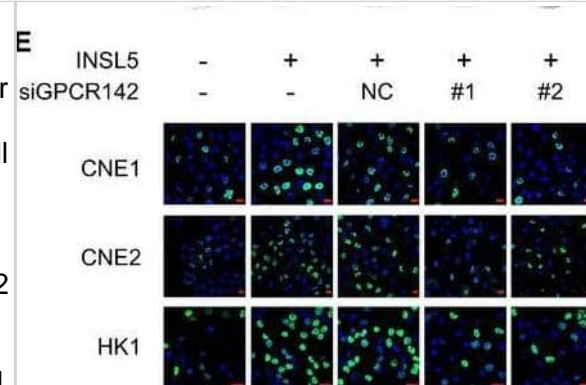


INSL5 promotes the progression of NPC via accelerating cell proliferation and invasion depending on GPCR142. Exogenous expression of INSL5 in NPC cells. Representative immunoblotting (upper panel) and immunofluorescent staining (lower panel) showed stable exogenous expression of INSL5 in both CNE1, CNE2, and HK1 NPC cell lines. Scale bars represent 20  $\mu\text{m}$ . BMTT assay of vector control or INSL5 overexpressing CNE1, CNE2, and HK1 NPC cell lines (upper panel) either transfected with control siRNA (NC) or GPCR142 siRNA (#1 and #2) (lower panel).  $n = 4$  biological replicates for CNE1 and CNE2 cell line,  $n = 6$  biological replicates for HK1. C-H Colony formation (C and D), Brdu incorporation (E and F), and migration assays (G and H) of vector control or INSL5 overexpressing CNE1, CNE2, and HK1 NPC cell lines either transfected with control siRNA (NC) or GPCR142 siRNA (#1 and #2). Representative images are shown in (C), (E), and (G) for colony formation, Brdu incorporation, and migration assays, respectively. Number of colonies, the percentage of Brdu positive cells, and migrated cells per field of view were plotted in (D, F, and H), respectively. The results are from three different experiments. Scale bars represent 20  $\mu\text{m}$  in (E) and 100  $\mu\text{m}$  in (G). I, J Xenograft tumor growth of INSL5 overexpression NPC HK1 stable cell lines in nude mice. Tumor size (I) and tumor weight (J) of two groups.  $n = 11$  mice per group. Data information: In (B, I, and J), data are presented as mean  $\pm$  SD, in (D, F, and H), data are presented as mean  $\pm$  SEM, from three different experiments, and  $P$  values were determined by unpaired  $t$  test. \* $P < 0.05$ , \*\* $P < 0.01$ , \*\*\* $P < 0.001$ , ns, no significance. Exact  $P$  values are specified in Appendix Table S4. Source data are available online for this figure. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/32657028>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

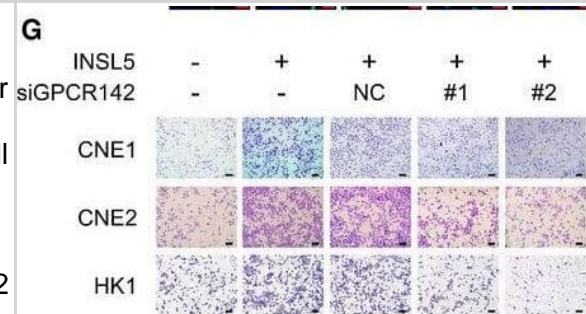
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## Publications

Li SB, Liu YY, Yuan L et al. Autocrine INSL5 promotes tumor progression and glycolysis via activation of STAT5 signaling EMBO Mol Med 2020-07-12 [PMID: 32657028]





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### Products Related to NBP1-86343

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NBP1-86343PEP	INSL5 Recombinant Protein Antigen
NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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