

# Proliferin (N-14): sc-47347

## BACKGROUND

Various hormones are secreted from the anterior pituitary during development and growth, including prolactin, lutropin (LH), thyroid-stimulating hormone (TSH) and the Proliferins. In rodents, there are four Proliferin proteins, designated Proliferin-1, Proliferin-2, Proliferin-3 and Proliferin-4, all of which are secreted and are thought to play a role in embryonic development. More specifically, the Proliferins provide a growth signals to target cells in fetal and maternal tissues during the mid-gestation phase of embryogenesis.

## REFERENCES

1. Linzer, D.I. and Nathans D. 1984. Nucleotide sequence of a growth-related mRNA encoding a member of the prolactin-growth hormone family. Proc. Natl. Acad. Sci. USA 81: 4255-4259.
2. Linzer, D.I. and Mordacq, J.C. 1987. Transcriptional regulation of Proliferin gene expression in response to serum in transfected mouse cells. EMBO J. 6: 2281-2288.

## CHROMOSOMAL LOCATION

Genetic locus: Prl2c2/Prl2c3/Prl2c4/Prl2c5 (mouse) mapping to 13 A1.

## SOURCE

Proliferin (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Proliferin-1 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.

Blocking peptide available for competition studies, sc-47347 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

Proliferin (N-14) is recommended for detection of Proliferin-1-4 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 Proliferin siRNA (m): sc-61412, Proliferin shRNA Plasmid (m): sc-61412-SH and Proliferin shRNA (m) Lentiviral Particles: sc-61412-V.

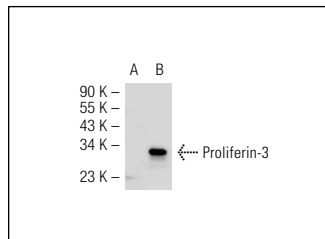
Molecular Weight of Proliferin: 28 kDa.

Positive Controls: Proliferin-3 (m): 293T Lysate: sc-122788 or mouse placenta extract: sc-364247.

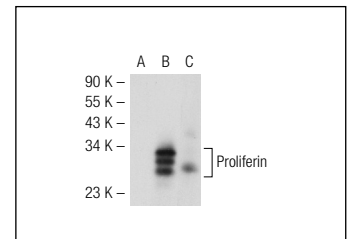
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Proliferin (N-14): sc-47347. Western blot analysis of Proliferin-3 expression in non-transfected: sc-117752 (A) and mouse Proliferin-3 transfected: sc-122788 (B) 293T whole cell lysates.



Proliferin (N-14): sc-47347. Western blot analysis of Proliferin expression in non-transfected: sc-117752 (A) and mouse Proliferin transfected: sc-122787 (B) 293T whole cell lysates and mouse placenta tissue extract (C).

## SELECT PRODUCT CITATIONS

1. Yang, X., Qiao, D., Meyer, K., Pier, T., Keles, S. and Friedl, A. 2012. Angiogenesis induced by signal transducer and activator of transcription 5A (STAT5A) is dependent on autocrine activity of proliferin. J. Biol. Chem. 287: 6490-6502.

## 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) or our catalog for detailed protocols and support products.


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Try **Proliferin (E-10): sc-271891**, our highly recommended monoclonal alternative to Proliferin (N-14).