SANTA CRUZ BIOTECHNOLOGY, INC.

Limitin (G-15): sc-34317

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Limitin, an IFN-like molecule also known as IFN-ζ, has weak sequence homology to IFN-α, IFN-β and IFN-ω and acts through the same IFN-α/β receptors. While Limitin has antiproliferative, immunomodulatory and antiviral effects similar to IFN-α and IFN-β, it lacks influence on myeloid and erythroid progenitors. Limitin binds to IFN-α/β receptors and induces IFN regulatory factor-1, indicating that Limitin constitutes a new prototype of the type I IFN family with an ability to arrest the growth of or kill lympho-hematopoietic cells. Strong immunomodulatory, antitumor and antiviral effects with weak myelosuppressive and weak acute toxic effects of Limitin indicate that it may be useful as a new therapeutic drug for virus-hepatitis and cancers.

REFERENCES

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3. Kawamoto, S., Oritani, K., Asakura, E., Ishikawa, J., Koyama, M., Miyano, K., Iwamoto, M., Yasuda, S., Nakakubo, H., Hirayama, F., Ishida, N., Ujiie, H., Masaie, H. and Tomiyama Y. 2004. A new interferon, Limitin, displays equivalent immunomodulatory and antitumor activities without myelosuppressive properties as compared with IFN-α. Exp. Hematol. 32: 797-805.
4. Oritani, K. and Tomiyama, Y. 2004. Interferon-ζ/Limitin: novel type I interferon that displays a narrow range of biological activity. Int. J. Hematol. 80: 325-331.
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CHROMOSOMAL LOCATION

Genetic locus: Ifnz (mouse) mapping to 4 C4.

SOURCE

Limitin (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Limitin 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-34317 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

Limitin (G-15) is recommended for detection of Limitin of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 Limitin siRNA (m): sc-45377.

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) 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.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.