



# LEAP-2 (C-13): sc-164845

## BACKGROUND

LEAP-2 (liver expressed antimicrobial peptide 2) is a 77 amino acid cationic protein that possesses antimicrobial activity and belongs to the LEAP2 family. Highly conserved among mammals, LEAP-2 exists as multiple alternatively spliced variants and is suggested to have a role in innate immune responses. The gene encoding LEAP-2 maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

## REFERENCES

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2. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 611373. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Murru, D., et al. 2008. Cri du chat mosaicism: an unusual case of partial deletion and partial deletion/duplication of the short arm of chromosome 5, leading to an unusual cri du chat phenotype. *Genet. Couns.* 19: 381-386.
4. Sazawal, S., et al. 2009. Haematological & molecular profile of acute myelogenous leukaemia in India. *Indian J. Med. Res.* 129: 256-261.
5. Eisenmann, K.M., et al. 2009. 5q- myelodysplastic syndromes: chromosome 5q genes direct a tumor-suppression network sensing actin dynamics. *Oncogene* 28: 3429-3441.
6. Howard, A., et al. 2010. Expression and functional analyses of liver expressed antimicrobial peptide-2 (LEAP-2) variant forms in human tissues. *Cell. Immunol.* 261: 128-133.
7. Wang, J.C., et al. 2010. Large distal 5p deletion with hemifacial microsomia and absence of cri-du-chat syndrome. *Clin. Dysmorphol.* 19: 38-39.
8. Yamamoto, K., et al. 2010. Two further cases of myelodysplastic syndrome and acute myeloid leukemia with der(5;19)(p10;q10): association with abnormalities involving chromosomes 12 and 21. *Leuk. Res.* 34: e38-e41.
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## CHROMOSOMAL LOCATION

Genetic locus: LEAP2 (human) mapping to 5q31.1; Leap2 (mouse) mapping to 11 B1.3.

## SOURCE

LEAP-2 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of LEAP-2 of human origin.

## STORAGE

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

## 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-164845 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

LEAP-2 (C-13) is recommended for detection of LEAP-2 of mouse and human 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).

LEAP-2 (C-13) is also recommended for detection of LEAP-2 in additional species, including bovine and porcine.

Suitable for use as control antibody for LEAP-2 siRNA (h): sc-91589, LEAP-2 siRNA (m): sc-146696, LEAP-2 shRNA Plasmid (h): sc-91589-SH, LEAP-2 shRNA Plasmid (m): sc-146696-SH, LEAP-2 shRNA (h) Lentiviral Particles: sc-91589-V and LEAP-2 shRNA (m) Lentiviral Particles: sc-146696-V.

Molecular Weight of LEAP-2: 8 kDa.

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