

Product Specification Sheet

Liver-expressed antimicrobial peptide 2 (LEAP-2) Antibodies

Cat # LEAP21-P	Human LEAP2 Control/Blocking Peptide # 1	SIZE: 100 ug
Cat # LEAP21-A	Rabbit anti-human LEAP2 IgG (affinity pure) # 1	SIZE: 100 ug

Human genome contains numerous genes whose protein products are unknown in terms of structure, interaction partner, expression, and function.

From human blood ultrafiltrate, a novel gene-encoded, cysteine-rich, and cationic peptide termed as **liver-expressed antimicrobial peptide 2 (LEAP-2)** together with several circulating forms of LEAP-2 differing in their amino-terminal length were identified, all containing a core structure with two disulfide bonds formed by cysteine residues in relative 1–3 and 2–4 positions. The largest native LEAP-2 form of 40 amino acid residues is generated from the precursor at a putative cleavage site for a furin-like endoprotease. In contrast to smaller LEAP-2 variants, this peptide exhibited dose-dependent antimicrobial activity against selected microbial model organisms.

LEAP2: rat= 75 aa; mouse= 76 aa; human= 77 aa; Human chromosome: 5q31.1. Protein homology between mouse, rat and human LEAP2 is 99%. LEAP2 is expressed in liver, blood, urine and kidney.

Source of Antigen and Antibodies

Antigen	20-aa peptide of Human LEAP-2 (Protein accession # Q969E1 ; ref. 1); designated as LEAP21-P control/blocking peptide conjugated to KLH
Epitope Location	~N-terminus
Antibody host/type	Rabbit, Polyclonal IgG # 1 (Cat # LEAP21-A), purified over antigen-Agarose
2-Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
Negative Control Ab	Non-immune rabbit IgG (Cat # 20009-1) to be used as –ve control for ELISA, WB, IHC etc.

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG

100 ug/100ul solution lyophilized powder

Supplied in **Buffer:** PBS+0.1% BSA

Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide

100 ug/100 ul solution lyophilized powder

Supplied in Buffer: PBS pH 7.5,

Reconstitute powder in PBS at 1 mg/ml.

Storage

Short-term: unopened, undiluted vials for less than a week at 4°C.

Long-term: at –20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20°C or below.

Shipping: 4°C for solutions and room temp for powder.

Recommended Usage

Western Blotting: 1-10 µg/ml; using affinity pure antibody (chemiluminescence technique).

ELISA: 1:100K; using 50-100 ng control peptide/well.

Histochemistry & Immunofluorescence: Not tested; we recommend the use of affinity purified antibody at 2-10 µg/ml.

Specificity & Cross-reactivity

Human LEAP21-P peptide sequence is 100% conserved in mouse and rat. Antibody cross-reactivity in various species is not known. The control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol at the web site).

General References:

1) Kraus A et al. *Protein Science* (2003), 12:143-152.

List of related items, data sheets, and publications, using ADI antibodies is posted on the web site

*This product is for in vitro research use only.

Related material available from ADI

Antibodies to C-terminal Epitope of mouse, human and rat LEAP2 protein.

LEAP21-A-P 70314J

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