

Cathelicidin Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP58243

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	P51437
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	19453
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse Camp
Epitope Specificity	101-170/170
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Secreted.
SIMILARITY	Belongs to the cathelicidin family.
Post-translational modifications	The N-terminus is blocked.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Cathelicidins are a family of antimicrobial proteins found in the peroxidase-negative granules of neutrophils. Along with the family of proteins known as defensins, cathelicidins participate in the first line of defense by preventing local infection and systemic invasion of microbes. FALL-39 precursor (FALL-39 peptide antibiotic, cationic anti-microbial protein, CAMP, CAP-18, HSD26) is a cathelicidin anti-microbial protein that contains the antibacterial peptide LL-37 (amino acids 134-170). In contrast to the defensins, which are cysteine-rich peptides that fold in β-pleated sheets, LL-37 is a cysteine-free peptide that can adopt an amphipathic α-helical conformation. LL-37 binds to bacterial lipopolysaccharides (LPS) and is a potent chemotactic factor for recruiting mast cells to sites of inflammation. LL-37 is present in inflammatory skin diseases that include psoriasis, sub-acute lupus erythematosus, dermatitis and nickel contact hypersensitivity. It is not found in normal skin epidermis. The secreted protein is expressed primarily in bone marrow, testis and neutrophils. The mouse and rat ortholog, CRAMP (cathelin-related antimicrobial peptide), is also part of the cathelicidin family of host defense peptides. These include precursors of potent antimicrobial peptides that direct antimicrobial activity against various microbial pathogens and also activate mesenchymal cells during wound repair. CRAMP is expressed in testis, spleen, stomach and intestine. This gene encodes a member of an antimicrobial peptide family, characterized by a highly conserved N-terminal signal peptide containing a cathelin domain and a structurally variable cationic antimicrobial peptide, which is produced by extracellular proteolysis from the C-terminus. The protein plays an important role in innate immunity defense against viruses. In addition to its

antibacterial, antifungal, and antiviral activities, the encoded protein functions in cell chemotaxis, immune mediator induction, and inflammatory response regulation. [provided by RefSeq, Sep 2021]

Additional Information

Gene ID	12796
Other Names	Cathelicidin antimicrobial peptide {ECO:0000312 MGI:MGI:108443}, Cathelin-like protein, CLP, Cathelin-related antimicrobial peptide, Cramp, Camp {ECO:0000312 MGI:MGI:108443}
Target/Specificity	Expressed in bone marrow and testis and neutrophils.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	Camp {ECO:0000312 MGI:MGI:108443}
Function	Antimicrobial protein that is an integral component of the innate immune system (By similarity). Binds to bacterial lipopolysaccharides (LPS) (By similarity).
Cellular Location	Secreted {ECO:0000250 UniProtKB:P54229}. Vesicle {ECO:0000250 UniProtKB:P54229}. Note=Stored as pro-peptide in granules and phagolysosomes of neutrophils. {ECO:0000250 UniProtKB:P54229}
Tissue Location	Expressed in granulocytes (at protein level) (PubMed:9148921). High expression in bone marrow and small intestine (PubMed:8706928, PubMed:9148921). Expressed in testis, spleen, stomach, and intestine (PubMed:9148921). Very low expression found in heart, lung and skeletal muscle (PubMed:9148921). No expression in brain, kidney or liver (PubMed:9148921).

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