

PRODUCT INFORMATION



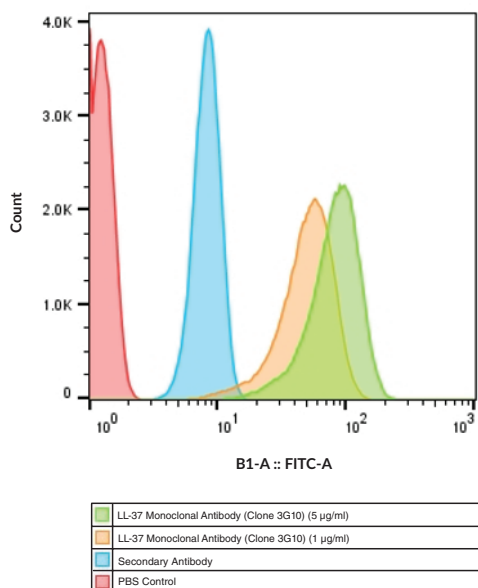
LL-37 Monoclonal Antibody (Clone 3G10)

Item No. 33679

Overview and Properties

Contents:	This vial contains 100 µg of protein G-affinity purified monoclonal antibody.
Synonym:	Antibacterial Protein LL-37
Immunogen:	Synthetic human LL-37
Cross Reactivity:	(+) LL-37, hCAP18
Species Reactivity:	(+) Human
Uniprot No.:	P49913
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Clone:	3G10
Host:	Mouse
Isotype:	IgG1
Applications:	ELISA and Flow Cytometry (FC); the recommended starting dilution is 1:1,000 for ELISA and 1:200 for FC. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Human neutrophils were fixed with 3.7% paraformaldehyde for 15 minutes on ice and blocked and permeabilized with PBS containing 5% FBS and 0.1% saponin for 1 hour at room temperature. LL-37 Monoclonal Antibody (Clone 3G10) was used at the indicated concentrations. Goat Anti-Mouse (IgG+IgM) FITC (Item No. 10006617) was used as the secondary antibody at a dilution of 1:200.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
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Description

LL-37 is a cationic α -helical peptide expressed in human bone marrow, testis, granulocytes, gingival epithelium, and a variety of immune cells.¹ It is produced by proteolytic cleavage of the cathelicidin human cationic antimicrobial protein of 18 kDa (hCAP18).² LL-37 has antimicrobial and antiviral activity, and protein levels of LL-37 are increased in epithelial cells, macrophages, and neutrophils following bacterial infection *in vitro*.^{1,3-5} It functions as a chemoattractant for human monocytes, neutrophils, and T cells, and induces chemokine secretion from epithelial cells in infected tissues.^{2,6} LL-37 is a component of LPS-induced neutrophil extracellular traps (NETs) produced from human neutrophils isolated from patients with systemic lupus erythematosus (SLE) or individuals without SLE.⁷ It also enhances formation of NETs induced by phorbol 12-myristate 13-acetate (PMA) or *S. aureus*.⁸ LL-37 can be citrullinated by protein arginine deiminase 2 (PAD2) and PAD4, a modification that reduces its antibacterial and antiviral activities.^{9,10} Native, but not citrullinated, LL-37 prevents mortality in a mouse model of D-galactosamine-sensitized endotoxic shock.⁹ Cayman's LL-37 Monoclonal Antibody (Clone 3G10) can be used for ELISA and flow cytometry (FC) applications.

References

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