Anti-FLA-PA

IgG monoclonal antibody to *Pseudomonas aeruginosa* flagellin

Catalog # mabg-flapa

For research use only, not for diagnostic or therapeutic use

Version # 13H14-MM

PRODUCT INFORMATION

Content

100 µg purified anti-FLA-PA provided azide-free and lyophilized

Clone: 18D7
Isotype: Mouse IgG1
Formulation: 0.2 µm filtered solution in 68 mM phosphate buffer with 91 mM glycine, 5% w/v saccharose and stabilizing agents

Antibody resuspension

Add 1 ml of sterile water to obtain a concentration of 0.1 mg/ml.

Storage

- Product is shipped at room temperature. Store lyophilized antibody at -20°C. Product is stable for 6 months.
- Reconstituted antibody is stable 1 month when stored at 4°C and 6 months when aliquoted and stored at -20°C. Avoid repeated freeze-thaw cycles.

BACKGROUND

Flagellin, the principal component of the flagella present on many Gram-negative and Gram-positive bacteria, is a proinflammatory molecule recognized by distinct types of pattern recognition receptors (PRRs); the surface localized Toll-like receptor (TLR5)[1] and the cytosolic NOD-like receptors (NLRs), NLRC4 and NAIP5[2].
Extracellular flagellin is detected by TLR5 resulting in MyD88-mediated NF-κB activation, cytokine and nitric oxide production depending on the nature of the TLR5 signaling complex[3]. Intracellular flagellin is detected by NLRC4 (also known as IPAF) and NAIP5. Recognition by NLRC4 and NAIP5, leads to inflammasome assembly, triggering caspase-1 activation of IL-1β and IL-18.

1. Hayashi F. *et al.*, 2001. The innate immune response to bacterial flagellin is mediated by Toll-like receptor 5. Nature 410(6832):1099-103. **2. Zhao Y. *et al.*, 2011.** The NLRC4 inflammasome receptors for bacterial flagellin and type III secretion apparatus. Nature.2011 Sep 14;477(7366):596-600. **3. Mizel SB. *et al.*, 2003.** Induction of macrophage nitric oxide production by Gram-negative flagellin involves signaling via heteromeric Toll-like receptor **5/Toll**-like receptor 4 complexes. J Immunol. 170(12):6217-23.

DESCRIPTION

Anti-FLA-PA is a mouse monoclonal antibody specific against flagellin from *Pseudomonas aeruginosa*. The antibody is suitable only for detection proposes. Anti-FLA-PA is produced in hybridomas and purified by Protein G affinity chromatography.

APPLICATIONS

Anti-FLA-PA can be used for detection by ELISA and Western blot. Different assay conditions require that serial dilution of all reagents be performed to determine optimal working concentrations. Prepare working dilution immediately before use.

Recommended working concentration for ELISA: 10 ng-1 µg/ml
Recommended working concentration for Western Blot: 1 µg/ml

RELATED PRODUCTS

Product	Catalog Code
FLA-PA Ultrapure	tlrl-pafla
HEK-Blue™ hTLR5 cells (human TLR5)	hkb-htlr5
HEK-Blue™ mTLR5 cells (mouse TLR5)	hkb-mtlr5
QUANTI-Blue™ (SEAP detection medium)	rep-qb1

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