

# Produktinformation



Forschungsprodukte & Biochemikalien
Zellkultur & Verbrauchsmaterial
Diagnostik & molekulare Diagnostik
Laborgeräte & Service

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Lieferung & Zahlungsart siehe unsere Liefer- und Versandbedingungen

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

#### SZABO-SCANDIC HandelsgmbH

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Anti-PI-LPS [1E4] Standard Size, 200  $\mu g,$  Ab03230-2.3 View online

## Anti-PI-LPS [1E4] Standard Size Ab03230-2.3

This antibody was created using our proprietary Fc Silent<sup>™</sup> engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

Isotype and Format: Mouse IgG2a, Fc Silent<sup>™</sup>, Kappa

Clone Number: 1E4

Alternative Name(s) of Target: phase I lipopolysaccharide; LPS phase I; C. burnetii PI-LPS; C. burnetii phase I lipopolysaccharide

**UniProt Accession Number of Target Protein:** 

Published Application(s): in vitro, in vivo, WB, ELISA

Published Species Reactivity: C. burnetii

**Immunogen:** The original antibody was generated by immunizing BALB/c mice with formalin-inactivated C. burnetii Nine Mile PI antigen.

**Specificity:** The antibody recognizes a PI specific epitope on PI-LPS. The antibody does not cross react with PII-LPS.

**Application Notes:** The specificity of the antibody (IgG2a) for PI-LPS was confirmed by ELISA analysis. The antibody detected PI-LPS by western blot analysis. The antibody was able to inhibit C. burnetii infection in vivo in a dose-dependent manner (Peng et al., 2012; PMID: 23053512). The original antibody could confer protection against C. burnetii aerosol infection. The Fab fragment, the scFv fragment and the humanized version of the antibody were constructed and characterized by indirect ELISA and Western Blot. They were able to bind to C. burnetii and to inhibit the infection in mice and in mouse Bone Marrow-Derived Macrophages (BMDM) in vitro. The humanized version inhibited C. burnetii infection in human macrophages in vitro. The Fab fragment was able to neutralize virulent C. burnetii resulting in inhibiting C. burnetii infection in both in vitro and in vivo systems (US20150087807A1). The ability of the original antibody, Fab, scFv, and humanized version of the antibody to inhibit C. burnetii infection in vivo was evaluated by comparing splenomegaly, bacterial burden, and pathological changes in the spleen with control mice at 14 days postinfection. IFA was used to analyze the ability of the original antibody to bind live virulent C. burnetii. The ability of the original to inhibit C. burnetii was higher than the ability of the other fragments. The humanized version of the antibody showed potential as a therapeutic against C. burnetii exposure (Peng et al., 2014; PMID: 25114119).

Antibody First Published in: Peng et al. Development of a lipopolysaccharide targeted peptide mimic vaccine against Q fever. J Immunol. 2012 Nov 15; 189(10): 10.4049/jimmunol.1201622. PMID:23053512 Note on publication: The paper describes the generation and characterization of the antibody.

# Product Form

Size: 200 μg Purified antibody.
Purification: Protein A affinity purified
Supplied In: PBS with 0.02% Proclin 300.
Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -

#### 20°C. Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.