OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850
UNITED STATES
Phone: +1-888-267-4436
Fax: +1-301-340-8606
techsupport@origene.com

OriGene Technologies GmbH
Schillerstr. 5
32052 Herford
GERMANY
Phone: +49-5221-34606-0
Fax: +49-5221-34606-11
info-de@origene.com

BP2235 Polyclonal Antibody to Lipopolysaccharide (LPS gram negative bacteria) - Purified

Alternate names: LPS, Lipid A

Quantity: 1 ml

Concentration: 4-5 mg/ml (OD280 nm, E0.1% = 1.4)

Background: Lipid A is a lipid component of an endotoxin held responsible for toxicity of Gram-negative bacteria. Sensing of lipid A by the human immune system may also be critical for the onset of immune responses to Gram-negative infection, and for the subsequent successful fight against the infection. Lipid A is located at one end of the lipopolysaccharide (LPS, also called endotoxin) molecule, and anchors the LPS to the outer membrane of a Gram-negative bacteria. Many of the immune activating abilities of LPS can be contributed to the lipid A unit. It is a very potent stimulant of the immune system, activating cells (for example, monocytes or macrophages) at picogram per milliliter quantities. When present in the body at high concentrations during a Gram-negative bacterial infection, it may cause shock and death by an "out of control" excessive immune reaction.

Host: Goat

Immunogen: Whole cells prep of Lipid A from *E. coli* O157

Format:
State: Liquid purified Ig fraction (› 95% pure)
Purification: Sodium Sulphate Precipitation and Ion Exchange Chromatography
Buffer System: 0.01M PBS, pH 7.2
Preservatives: 0.09% Sodium Azide
Stabilizers: None

Applications:
Indirect Immunofluoresence: › 1/100 (against members of the Entero-bacteriaciae).
May also be used in place of neat antiserum in almost any appropriate antibody-based technique.
Also suitable for conjugation purposes.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: The antibody recognizes Lipid A / Lipopolysaccharide (LPS Gram Negative Bacteria). Cross-reactive with numerous members of the Enterobacteriaciae: *Pseudomonas aeruginosa, Klebsiella pneumoniae, E. coli O157, Salmonella enteriditis, Enterobacter aerogenes, E. hermanii, Yersinia enterocolitica* and *Shigella sonnei.*

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

Product Citations:
Purchased from Acris:
1. Sünderhauf, A;Skibbe, K;Preisker, S;Ebbert, K;Verschoor, A;Karsten, CM;Kemper, C;Huber-Lang, M;Basic, M;Bleich, A;Büning, J;Fellermann, K;Sina, C;Derer, S. Regulation of epithelial cell expressed C3 in the intestine - Relevance for the

pathophysiology of inflammatory bowel disease? Mol. Immunol. 2017, 227-238, 90. PubMed PMID: 28843904.

General Readings:

1. Gibson DL, White AP, Snyder SD, Martin S, Heiss C, Azadi P, et al. Salmonella produces an O-antigen capsule regulated by AgfD and important for environmental persistence. J Bacteriol. 2006 Nov;188(22):7722-30. PubMed PMID: 17079680.