Chondrex, Inc.

Biotinylated Lipopolysaccharide (LPS) from *Escherichia coli* O111:B4

Catalog # 6108

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INFORMATION: Lipopolysaccharide (LPS), also known as endotoxin, is the major structural component of the outer membrane of gram-negative bacteria. This glycolipid stimulates the host immune system and plays pathological roles in inflammatory diseases such as bacterial sepsis, inflammatory bowel disorders, lung disease, periodontal disease, and asthma (1-4).

DESCRIPTION: Biotinylated LPS from *E. coli* O111:B4

APPLICATION: To facilitate studies on host recognition of LPS, a biotinylated LPS and a streptavidin conjugated probe (an enzyme or a fluorochrome) can be used for identifying LPS ligands in many applications such as: enzyme immunoassay, western blot, flow cytometry, and fluorescence microscopy (5). In addition, LPS-ligand interactions can be evaluated in a pull-down assay as demonstrated with HMGB1: a late stage mediator of endotoxin shock (6). Chondrex also provides purified bovine HMGB1 for use as a positive control for these LPS binding assays (catalog # 9050).

QUANTITY: 0.1 mg, lyophilized

STORAGE TEMPERATURE: -20°C

STABILITY: 2 years

REFERENCES:

1. Karima R. et al. The molecular pathogenesis of endotoxic shock and organ failure. Mol Med Today 5(3):123-32 (1995).
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3. Goldberg JB and Pler GB. Psudomonas aeruginosa lipopolysaccharides and pathogenesis. Trends Microbiol 4(12):490-4 (1996).
4. Bainbridge BW. et al. Porphyromonas gingivalis lipopolysaccharide displays functionally diverse interactions with the innate host defense system. Ann Periodontol 7(1):29-37 (2002).
5. Luk JM. et al. Biotinylated lipopolysaccharide binds to endotoxin receptor in endothelial and monocytic cells. Anal Biochem 232(2):217-24 (1995).
6. Hreggvidsdottir HS. et al. The alarmin HMGB1 acts in synergy with endogenous and exogenous danger signals to promote inflammation. J Leukoc Biol 86 (3):655-62 (2009).

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