

## Lipopolysaccharide from *E. Coli* 0111:B4

Catalog # 9028

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DESCRIPTION:	Lipopolysaccharide (LPS) from <i>E. Coli</i> 0111:B4 in PBS
APPLICATION:	<p>LPS has two independent unique activities: one is triggering inflammatory reactions and the other is stimulating B-cells to produce antibodies. Use these unique activities for triggering, synchronizing, or enhancing the development of arthritis in both collagen-induced arthritis (CIA) and collagen antibody-induced arthritis (CAIA) models.</p> <p>A) In CAIA model: Use LPS to trigger arthritis in mice under the presence of sub-arthritis levels of autoantibodies to type II collagen.</p> <ol style="list-style-type: none"><li>1) Inject sub-arthritis dose of polyclonal antibodies or a cocktail of monoclonal antibodies into mice on day 0, and then inject 25-50 µg of LPS by IP to trigger the development of arthritis.</li><li>2) An additional IP injection of LPS on day 7-14 re-activates arthritis.</li></ol> <p>B) In CIA model: Use to stimulate autoantibody production and development of arthritis in mice immunized with type II collagen.</p> <ol style="list-style-type: none"><li>1) To synchronize arthritis development: Immunize mice with type II collagen/CFA on day 0 and then inject of 25-50 µg of LPS by IP on day 25-28, just before the expected onset of arthritis.</li><li>2) To stimulate antibody production and development of arthritis: Immunize mice with type II collagen/CFA on day 0 and then inject 20-50 µg of LPS by IP on day 21 or 28 to increase antibody production and the following development of arthritis.</li><li>3) To reactivate arthritis: Inject 25-50 µg of LPS by IP in mice on day 50-80, the late stage of CIA.</li></ol> <p>C) LPS is also used at low levels (0.01-1 µg/ml) as a positive control in vitro for stimulating the production and release of cytokines and chemokines.</p>
QUANTITY:	5 ml
FORM:	0.5 mg/ml solution
SOURCE:	<i>E. coli</i> 0111:B4
STORAGE TEMPERATURE:	-20°C
STABILITY:	1 year