

[Open Peer Review on Qeios](#)

Monophosphoryl Lipid A

National Cancer Institute

Source

National Cancer Institute. *Monophosphoryl Lipid A*. NCI Thesaurus. Code C87754.

A modified form of lipid A, the biologically active part of Gram-negative bacterial lipopolysaccharide (LPS) endotoxin, and a Toll-like receptor 4 (TLR4) agonist, with potential immunostimulatory activity. As a vaccine adjuvant, monophosphoryl lipid A (MPLA) stimulates both cellular and humoral responses to the vaccine antigen. Compared to LPS, MPLA exerts a similar immunostimulatory activity but with reduced toxicity.