FSL-1 is an agonist at toll-like receptors (TLR 2/6) that exhibits immunostimulatory, pro-inflammatory, and anticancer activities. FSL-1 increases IgE and IgA responses to foods during systemic antigenic challenge. In vitro, this compound increases expression and activity of MMP-9, IL-6, IL-9, and COX-2. FSL-1 is also used as an adjuvant, in which it induces a Th2-specific response by increasing IgA and IgG levels. FSL-1 also increases tumor size when given alone, but if combined with tumor-specific antigens, decreases tumor size by stimulating production of antigen-specific cytotoxic T lymphocytes, antibodies, and NK cells.

References


