

Resiquimod

货号: R2798

储存条件: 粉末-20°C 可保存 3 年; 液体-80°C 可保存 12 月。

产品描述

Toll-like receptors (TLRs) are a family of pattern recognition receptors involving in the innate and adaptive immunity. The activation of TLR7, which is intracellular receptor expressed on endosomal membranes, can induce Type 1 interferon and inflammatory response. Resiquimod is an immune system modifier as a TLR7 agonist with high potency induce cytokine expression for the treatment of viral and tumor lesions. The EC50 of the resiquimod is 1.4 μ M to TLR7.

Acute myeloid leukemia (AML) cells were treated with 5 μ g/mL of resiquimod during 24 h. The expression of MHC class I and II molecules on the membrane of primary AML cells measured by flow cytometry and the production of IL-6, IL-1 β and TNF- α measured by multiplex fluorescent bead immunoassay, were increased after the treatment with resiquimod.

The resiquimod were injected to BALB/c mice with breast cancer intraperitoneally for three continuous days in a week for three weeks. The resiquimod could significantly retard tumor growth compared with the vehicle group by reducing the density of tumor vasculature and inducing tumor cell apoptosis.

作用机制

The effect of resiquimod in the TLR signaling pathway is through binding to the TLR7. Therefore, it can activate the TLR7 mainly on dendritic cells, macrophages, and B-lymphocytes.

产品信息

CAS 号	144875-48-9	
分子式	C17H22N4O2	
分子量	314.38	
溶解度	DMSO	130.0 mg/mL (413.5 mM) warming
	Water	insoluble

