

Methotrexate

货号: M6844

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

Methotrexate (0.1-10 mM) induces apoptosis of in vitro activated T cells from human peripheral blood. Methotrexate achieves clonal deletion of activated T cells in mixed lymphocyte reactions. Methotrexate can selectively delete activated peripheral blood T cells by a CD95-independent pathway. Methotrexate is taken up by cells via the reduced folate carrier and then is converted within the cells to polyglutamates. Methotrexate leads to diminished production of leukotriene B4 by neutrophils stimulated ex vivo. Methotrexate polyglutamates inhibit the enzyme aminoimidazolecarboxamidoadenosineribonucleotide (AICAR) transformylase more potently than the other enzymes involved in purine biosynthesis. Methotrexate is also known to suppress TNF activity by suppressing TNF-induced nuclear factor- κ B activation in vitro, in part related to a reduction in the degradation and inactivation of an inhibitor of this factor, I κ B α , and probably related to the release of adenosine. Methotrexate suppresses the production of both TNF and IFN- γ by T-cell-receptor-primed T lymphocytes from both healthy human donors and RA patients. Methotrexate treatment is associated with a significant decrease of TNF- α -positive CD4+ T cells, while the number of T cells expressing the anti-inflammatory cytokine IL-10 increased.

产品信息

CAS 号	59-05-2	
分子式	C ₂₀ H ₂₂ N ₈ O ₅	
分子量	454.44	
别名	NCI-C04671; CL14377; WR-19039	
溶解度	DMSO	390.0 mg/mL (858.2 mM) warming
	Water	insoluble

