

Fingolimod

货号: F2321

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

Fingolimod is an S1p receptor modulator and also immunosuppressant. It can be primarily phosphorylated by SPHK2 to its active form fingolimod-P. Although fingolimod-P (but not parent fingolimod) could function as an agonist at S1P1, S1P4 and S1P5 receptors with EC50 values ranging in ~0.3–0.6nM and at 10- fold higher concentrations at S1P3 receptors with EC50 values of ~3 nM, it caused S1P receptors to internalize from cell membranes and induce ubiquitinylation and proteasomal degradation of the receptor. That is, effects of Fingolimod are inhibitory in the longer term on S1P receptor function. Fingolimod was used to treat for multiple sclerosis. Culture with FTY720 at concentration of 1μM for 22 hours could stimulate survival of the oligodendrocyte progenitors, and an activation of both MEK/ERK1/2 and PI3K/Akt pathways dependent on transforming to fingolimod-P by SphK could be observed. Fingolimod is highly effective in experimental autoimmune encephalomyelitis model. Administration of fingolimod at dose of 0.03 to 1 mg/kg could significant improve the symptoms of chronic experimental autoimmune encephalomyelitis induced by myelin oligodendrocyte glycoprotein in mice due to the reduction of infiltration of myelin antigen-specific Th17 and Th1 cells into the central nervous system.

作用机制

The aminodiol polar head group of fingolimod could be phosphorylated by SPHK2 and the lipophilic tail is important for interacting with the hydrophobic binding pocket of the S1P receptors.

储存液制备	质量	1 mg	5 mg	10 mg
	1 mM	3.2523 mL	16.2617 mL	32.5234 mL
	5 mM	0.6505 mL	3.2523 mL	6.5047 mL
	10 mM	0.3252 mL	1.6262 mL	3.2523 mL

产品信息

CAS号	162359-55-9		
分子式	C19H33NO2		
分子量	307.47		
溶解度	DMSO	40.0 mg/mL (130.1 mM)	





兰博利德 LABLEAD
高新技术企业

