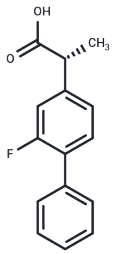
Data Sheet (Cat.No.T5843)

TargetMol

Tarenflurbil

Chemical Properties



CAS No. : 51543-40-9

Formula: C15H13FO2

Molecular Weight: 244.26

Storage: Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Tarenflurbil ((R)-Flurbiprofen) is the non-cyclooxygenase inhibiting R-enantiomer of the NSAID flurbiprofen, evaluated as a treatment for Alzheimer's disease.
Targets(IC50)	Retinoid Receptor,Autophagy
In vivo	Oral R-flurbiprofen prevented and attenuated primary progressive EAE in C57BL6/J mice and relapsing-remitting EAE in SJL mice, even if the treatment was initiated on or after the first flare of the disease.?R-flurbiprofen reduced immune cell infiltration and microglia activation and inflammation in the spinal cord, brain and optic nerve and attenuated myelin destruction and EAE-evoked hyperalgesia.?R-flurbiprofen treatment increased CD4(+)CD25(+)FoxP3(+) regulatory T cells, CTLA4(+) inhibitory T cells and interleukin-10, whereas the EAE-evoked upregulation of pro-inflammatory genes in the spinal cord was strongly reduced.?The effects were associated with an increase of plasma and cortical endocannabinoids but decreased spinal prostaglandins, the latter likely due to R to S inversion.
Animal Research	Bone marrow transplantation (BMX), recipient C57BL6/J mice received a 9.5 Gy cobalt 60 gamma irradiation and subsequently an intravenous injection through the tail vein of 6 × 10^6 bone marrow cells, which were harvested from tibia and femur of β-actin-EGFP donor mice.?Immunization was done with MOG35-55/CFA emulsion plus PTX 3 weeks after BMX and treatment with R-flurbiprofen or vehicle started 3 days after immunization.

Solubility Information

Solubility	DMSO: 50 mg/mL (204.7 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (8.19 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.094 mL	20.470 mL	40.940 mL
5 mM	0.8188 mL	4.094 mL	8.188 mL
10 mM	0.4094 mL	2.047 mL	4.094 mL
50 mM	0.0819 mL	0.4094 mL	0.8188 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Schmitz K , De Bruin N , Bishay P , et al. R-flurbiprofen attenuates experimental autoimmune encephalomyelitis in mice[J]. EMBO Molecular Medicine, 2014, 6(11):1398-1422.