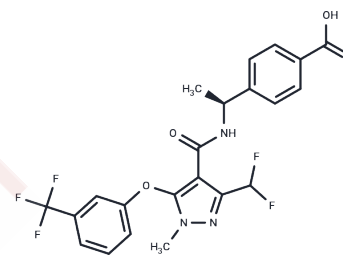


E7046

Chemical Properties

CAS No. : 1369489-71-3
 Formula: C₂₂H₁₈F₅N₃O₄
 Molecular Weight: 483.4
 Storage: 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	E7046 is a specific, orally bioavailable EP4 antagonist (IC ₅₀ : 13.5 nM, Ki: 23.14 nM), exhibiting anti-tumor activities.
Targets(IC ₅₀)	Prostaglandin Receptor
In vitro	Through selective EP4 antagonism, E7046 reverses the immunosuppressive effects of PGE ₂ on activation and differentiation of human myeloid cells [1].
In vivo	E7046 (150 mg/kg) inhibits the growth of multiple syngeneic tumor models. The blockade of EP4 signaling promotes anti-tumor DC differentiation and slows tumor growth in mice. E7046 treatment reduces the growth or even rejected established tumors in vivo in a manner dependent on both myeloid and CD8C T cells [1]. In the CT-26 tumor model, the E7046/RT combination causes the anti-tumor memory response of 9 animals. In the 4T1 model, the combination of E7046 and RT also produces significantly better tumor growth inhibition activity compared with each treatment alone. The combination significantly improves survival by inhibiting the subsequent spontaneous lung metastasis of 4T1 tumors [2].

Solubility Information

Solubility	DMSO: 100 mg/mL (206.87 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: 3.3 mg/mL (6.83 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0687 mL	10.3434 mL	20.6868 mL
5 mM	0.4137 mL	2.0687 mL	4.1374 mL
10 mM	0.2069 mL	1.0343 mL	2.0687 mL
50 mM	0.0414 mL	0.2069 mL	0.4137 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

Diana I. Albu, et al. EP4 Antagonism by E7046 diminishes Myeloid immunosuppression and synergizes with Treg-reducing IL-2-Diphtheria toxin fusion protein in restoring anti-tumor immunity. *OncolImmunology*.

X. Bao, et al. Combination of a Novel EP4 Antagonist E7046 and Radiation Therapy Promotes Anti-tumor Immune Response and Tumor Rejection in Preclinical Tumor Models. *International Journal of Radiation Oncology Biology Physics*

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481