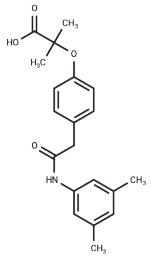
Data Sheet (Cat.No.T21318)

TargetMol

Efaproxiral

Chemical Properties



CAS No. : 131179-95-8

Formula: C20H23NO4

Molecular Weight: 341.4

Storage: Keep away from moisture,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	Efaproxiral (RSR13) is a hemoglobin allosteric modifier, a potential radiosensitizer and chemotherapy enhancer in cancer treatment, improving tumor oxygenation.
Targets(IC50)	Reactive Oxygen Species,ROS
In vivo	Treatment with Efaproxiral(150 mg/kg, ip) significantly increased oxygenation in RIF-1 tumors implanted in C3H mice and increased the ability of radiotherapy to inhibit tumor growth within 5 days. [1] Efaproxiral may increase the oxygenation capacity of intracranial tumors. [2]

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble), DMSO: 120 mg/mL (351.49 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: 4 mg/mL (11.72 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	2.9291 mL	14.6456 mL	29.2912 mL
5 mM	0.5858 mL	2.9291 mL	5.8582 mL
10 mM	0.2929 mL	1.4646 mL	2.9291 mL
50 mM	0.0586 mL	0.2929 mL	0.5858 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

Hou H, et al. The effects of Efaproxyn (efaproxiral) on subcutaneous RIF-1 tumor oxygenation and enhancement of radiotherapy-mediated inhibition of tumor growth in mice. Radiat Res. 2007 Aug;168(2):218-25.
Hou H, et al. The effects of Efaproxyn (efaproxiral) on subcutaneous RIF-1 tumor oxygenation and enhancement of radiotherapy-mediated inhibition of tumor growth in mice. Radiat Res. 2007 Aug;168(2):218-25.
Scott C, Suh J, Stea B, Nabid A, Hackman J. Improved survival, quality of life, and quality-adjusted survival in breast cancer patients treated with efaproxiral (Efaproxyn) plus whole-brain radiation therapy for brain metastases. Am J Clin Oncol. 2007 Dec;30(6):580-7. PubMed PMID: 18091051.
Hou H, Khan N, Grinberg OY, Yu H, Grinberg SA, Lu S, Demidenko E, Steffen RP, Swartz HM. The effects of Efaproxyn (efaproxiral) on subcutaneous RIF-1 tumor oxygenation and enhancement of radiotherapy-mediated inhibition of tumor growth in mice. Radiat Res. 2007 Aug;168(2):218-25. PubMed PMID: 17638413.

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