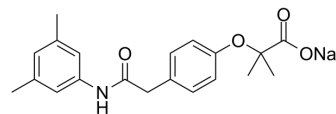


Efaproxiral sodium

Cat. No.:	HY-13619A
CAS No.:	170787-99-2
Molecular Formula:	C ₂₀ H ₂₂ NNaO ₄
Molecular Weight:	363.38
Target:	Reactive Oxygen Species
Pathway:	Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 39 mg/mL (107.33 mM)
 H₂O : ≥ 33.33 mg/mL (91.72 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.7519 mL	13.7597 mL	27.5194 mL
	5 mM	0.5504 mL	2.7519 mL	5.5039 mL
	10 mM	0.2752 mL	1.3760 mL	2.7519 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.08 mg/mL (5.72 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.08 mg/mL (5.72 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.08 mg/mL (5.72 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Efaproxiral sodium (RSR13 sodium) is a synthetic allosteric modifier of haemoglobin (Hb), decreases Hb-oxygen (O₂) binding affinity and enhances oxygenation of hypoxic tumours during radiation therapy. *in vitro*: Efaproxiral increases oxygen levels in hypoxic tumor tissues by binding non-covalently to the hemoglobin tetramer and decreasing hemoglobin-oxygen binding affinity. Increasing tumor oxygenation reduces tumor radioresistance. Efaproxiral can enhance the oxygenation of hypoxic tumours and function as a radiation sensitiser, increasing the effectiveness of RT.

CUSTOMER VALIDATION

- J Enzyme Inhib Med Chem. 2021 Dec;36(1):377-383.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Stea B, et al. Efaproxiral red blood cell concentration predicts efficacy in patients with brain metastases. Br J Cancer. 2006 Jun 19;94(12):1777-1784.
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Caution: Product has not been fully validated for medical applications. For research use only.

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