



Catalog # 10-2527

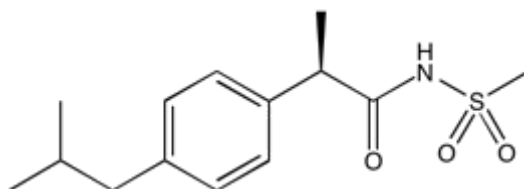
Reparixin

CAS# 266359-83-5

α R-Methyl-4-(2-methylpropyl)-N-(methylsulfonyl)-benzeneacetamide

DF 1681Y; Repertaxin

Lot # X106715



Reparixin is a noncompetitive allosteric inhibitor of IL-8 (CXCL8) activation of CXCR1 and CXCR2 chemokine receptors (IC_{50} = 1 and 100 nM, respectively). It blocks a number of activities related to IL-8 signaling, including leukocyte recruitment (IC_{50} = 1 nM) without affecting receptor activation induced by other CXCR1 and CXCR2 agonists.¹ In spontaneously hypertensive rats, 5 mg/kg reparixin administered daily for three weeks was shown to reduce blood pressure by inhibiting hypertension-related mediators.² It attenuates inflammatory responses and promotes recovery of function after traumatic lesion to the spinal cord.³ Reparixin blockade (100 nM) of CXCR1 has also been used to deplete a cancer stem cell population in human breast cancer cell lines *in vitro*.⁴

- 1) Bertini *et al.* (2004), *Non-competitive allosteric inhibitors of the inflammatory cytokine receptors CXCR1 and CXCR2: prevention of reperfusion injury*; Proc. Natl. Acad. Sci. USA, **101** 11791
- 2) Kim *et al.* (2011), *Reparixin, an inhibitor of CXCR1 and CXCR2 receptor activation, attenuates blood pressure and hypertension-related mediators expression in spontaneously hypertensive rats*; Biol. Pharm. Bull., **34** 120
- 3) Gorio *et al.* (2007), *Reparixin, an inhibitor of CXCR2 function, attenuates inflammatory responses and promotes recovery of function after traumatic lesion to the spinal cord*; J. Pharmacol. Exp. Ther., **322** 973
- 4) Ginestier *et al.* (2010), *CXCR1 blockade selectively targets human breast cancer stem cells in vitro and in xenografts*; J. Clin. Invest., **120** 485

PHYSICAL DATA

Molecular Weight:	283.39
Molecular Formula:	C ₁₄ H ₂₁ NO ₃ S
Purity:	99% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 100 mg/ml) or Ethanol (up to 25 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied, desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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