

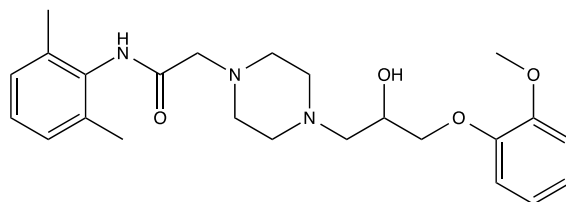
Catalog # 10-3701

Ranolazine

CAS# 142387-99-3

(±)-N-(2,6-Dimethylphenyl)-2-[4-[2-hydroxy-3-(2-methoxyphenoxy)-propyl]piperazin-1-yl]acetamide

Lot # FBA2070



Ranolazine is an FDA-approved drug used for the treatment of chronic angina. It inhibits the late inward sodium current in heart muscle leading to decreased intracellular calcium levels.¹ It blocks Nav 1.4, 1.5, 1.7 and 1.8 (IC₅₀'s = 2.4², 6.2², 1.7²(10.3³), 21.5³ μM respectively).

- 1) Belardinelli, *et al.*, (2006), *Inhibition of the late sodium current as a potential cardioprotective principle: effects of the late sodium current inhibitor ranolazine*; Heart **92** iv6
- 2) Wang, *et al.* (2008), *State- and Use-Dependent Block of Muscle Nav1.4 and Neuronal Nav1.7 Voltage-Gated Na⁺-Channel Isoforms by Ranolazine*; Mol. Pharmacol. **73** 940
- 3) Rajamani, *et al.*, (2008), *Block of tetrodotoxin-sensitive, Na(V)1.7 and tetrodotoxin-resistant, Na(V)1.8, Na⁺ channels by ranolazine*; Channels(Austin) **2** 449

PHYSICAL DATA

Molecular Weight:	427.54
Molecular Formula:	C ₂₄ H ₃₃ N ₃ O ₄
Purity:	98%(TLC: 10% Methanol/methylene chloride; R _f = 0.63)
Solubility:	Soluble in DMSO (>25 mg/mL) and ethanol (20 mg/mL).
Physical Description:	White solid
Storage and Stability:	Store as supplied at room temperature for up to 1 year from the date of purchase. DMSO and ethanol solutions may be stored at -20°C for up to one month.

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