

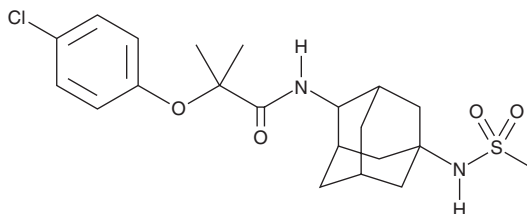
PRODUCT INFORMATION



JNJ-303

Item No. 37345

CAS Registry No.: 878489-28-2
Formal Name: 2-(4-chlorophenoxy)-2-methyl-N-[5-[(methylsulfonyl)amino]tricyclo[3.3.1.1^{3,7}]dec-2-yl]propanamide, stereoisomer
MF: C₂₁H₂₉ClN₂O₄S
FW: 441.0
Purity: ≥98%
UV/Vis.: λ_{max}: 225 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

JNJ-303 is supplied as a solid. A stock solution may be made by dissolving the JNJ-303 in the solvent of choice, which should be purged with an inert gas. JNJ-303 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of JNJ-303 in these solvents is approximately 1 mg/ml.

Description

JNJ-303 is an inhibitor of voltage-gated potassium channel K_v7.1 (IC₅₀ = 0.064 μM).¹ It is selective for inhibiting K_v7.1 currents (I_{Ks}) over I_{Na}, I_{Kr}, I_{to}, I_{K1}, and I_{CaL} (IC₅₀s = 3.3, 12.6, 11.1, >100, and >10 μM, respectively). It selectively inhibits the heteromeric K_v7.1-KCNE1 complex (IC₅₀ = 0.0784 μM) with no effect on homomeric K_v7.1, K_v7.2, or K_v1.5 in *Xenopus* oocytes at 1 μM.² JNJ-303 prolongs the QT interval and also induces pause-dependent torsade de pointes (TdP) in anesthetized dogs when used at doses of 0.63 and 1.25 mg/kg, respectively.¹

References

1. Towart, R., Linders, J.T.M., Herman, A.N., *et al.* Blockade of the I_{Ks} potassium channel: An overlooked cardiovascular liability in drug safety screening? *J. Pharmacol. Toxicol. Methods* **60**(1), 1-10 (2009).
2. Wrobel, E., Rothenberg, I., Krisp, C., *et al.* KCNE1 induces fenestration in the Kv7.1/KCNE1 channel complex that allows for highly specific pharmacological targeting. *Nat. Commun.* **7**, 12795 (2016).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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