

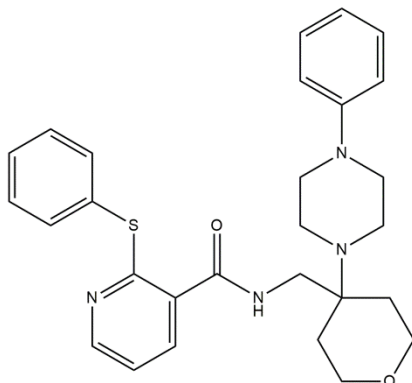
JNJ-47965567

01/20

ALTERNATE NAMES: N-[[4-(4-phenylpiperazin-1-yl)oxan-4-yl]methyl]-2-phenylsulfanylpyridine-3-carboxamide; N-((4-(4-phenylpiperazin-1-yl)tetrahydro-2H-pyran-4-yl)methyl)-2-(phenylthio)nicotinamide; 2-(Phenylthio)-N-[[tetrahydro-4-(4-phenyl-1-piperazinyl)-2H-pyran-4-yl]methyl]-3-pyridinecarboxamide; P2X Antagonist III

CATALOG #: B2972-5 5 mg
B2972-25 25 mg

STRUCTURE:



MOLECULAR FORMULA: C₂₈H₃₂N₄O₂S

MOLECULAR WEIGHT: 488.64

CAS NUMBER: 1428327-31-4

APPEARANCE: Solid

PURITY: 98%

SOLUBILITY: ~30 mg/ml in DMSO and DMF
~12.5 mg/ml in Ethanol

DESCRIPTION: JNJ-47965567 is a potent and selective antagonist of the purinergic receptor P2X subtype 7 (P2X₇), a ligand-gated ion channel. Activation of P2X receptors by BzATP induces calcium flux. JNJ-47965567 attenuates Bz-ATP induced calcium flux in 1321N1 astrocytoma cells transfected with the recombinant P2X₇ proteins with pI_{C₅₀} values of 8.3, 7.5 and 7.2 for human, mouse and rat receptors respectively. JNJ-47965567 (30 mg/kg for 5 days) significantly reduces spontaneous seizures in epileptic mice even after treatment is stopped.

STORAGE TEMPERATURE: -20°C. Protect from air. Store under desiccating conditions.

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

REFERENCES:

1. Jimenez-Pacheco, A., Diaz-Hernandez, M., Arribas-Blázquez, M., et al. Transient P2X₇ receptor antagonism produces lasting reductions in spontaneous seizures and gliosis in experimental temporal lobe epilepsy. *J. Neurosci.* 36(22), 5920-5932 (2016).
2. Bhattacharya, A., Wang, Q., Ao, H., et al. Pharmacological characterization of a novel centrally permeable P2X₇ receptor antagonist: JNJ-47965567. *Br. J. Pharmacol.* 170(3), 624-640 (2013).

RELATED PRODUCTS:

Evans Blue Tetrasodium (Cat. No. 2586)
 Triclopidine hydrochloride (Cat. No. B1141)
 Suramin Hexasodium Salt (Cat. No. 1874)
 BPTU (Cat. No. B2323)
 KN-62 (Cat. No. 2495)

DISCLAIMER: **FOR RESEARCH USE ONLY! Not to be used on humans.**