

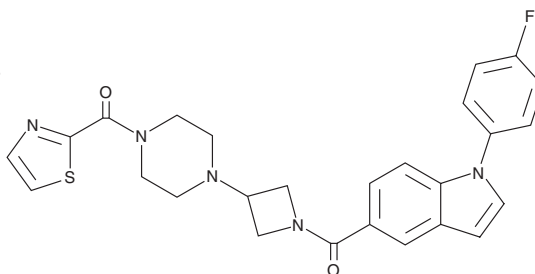
PRODUCT INFORMATION



JNJ-42226314

Item No. 41115

CAS Registry No.: 1252765-13-1
Formal Name: [4-[1-[[1-(4-fluorophenyl)-1H-indol-5-yl]carbonyl]-3-azetidyl]-1-piperazinyl]-2-thiazolyl-methanone
MF: C₂₆H₂₄FN₅O₂S
FW: 489.6
Purity: ≥98%
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-42226314 is supplied as a solid. A stock solution may be made by dissolving the JNJ-42226314 in the solvent of choice, which should be purged with an inert gas. JNJ-42226314 is sparingly soluble (1-10 mg/ml) in the organic solvent DMSO.

Description

JNJ-42226314 is an inhibitor of monoacylglycerol lipase (MAGL; IC₅₀ = 10 nM).¹ It is selective for MAGL over a panel of 15 serine proteases at 10 μM. JNJ-42226314 (30 mg/kg) increases the latency to paw withdrawal in the hot plate test and the brain levels of 2-arachidonoyl glycerol (2-AG; Item No. 62160) in rats. It increases the latency to fall asleep and the development of non-rapid eye movement (NREM) and REM sleep, as well as increases the cortical levels of norepinephrine, in rats when administered at a dose of 30 mg/kg.² Radiolabeled forms of JNJ-42226314 have been used for autoradiography and PET tracers for MAGL in the brains of rats and rhesus monkeys.³

References

1. Zhu, B., Connolly, P.J., Zhang, Y.M., *et al.* The discovery of azetidine-piperazine di-amides as potent, selective and reversible monoacylglycerol lipase (MAGL) inhibitors. *Bioorg. Med. Chem. Lett.* **30**(14), 127243 (2020).
2. Wyatt, R.M., Fraser, I., Welty, N., *et al.* Pharmacologic characterization of JNJ-42226314, [1-(4-fluorophenyl)indol-5-yl]-[3-[4-(thiazole-2-carbonyl)piperazin-1-yl]azetidin-1-yl]methanone, a reversible, selective, and potent monoacylglycerol lipase inhibitor. *J. Pharmacol. Exp. Ther.* **372**(3), 339-353 (2020).
3. Rong, J., Mori, W., Xia, X., *et al.* Novel reversible-binding PET ligands for imaging monoacylglycerol lipase based on the piperazinyl azetidine scaffold. *J. Med. Chem.* **64**(19), 14283-14298 (2021).

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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