

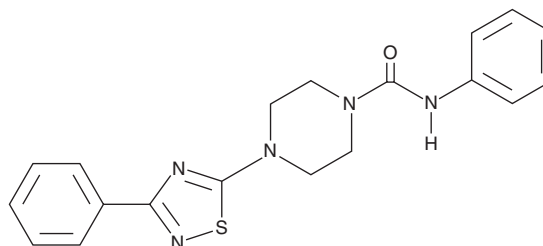
PRODUCT INFORMATION



JNJ-1661010

Item No. 14497

CAS Registry No.: 681136-29-8
Formal Name: N-phenyl-4-(3-phenyl-1,2,4-thiadiazol-5-yl)-1-piperazinecarboxamide
MF: C₁₉H₁₉N₅OS
FW: 365.5
Purity: ≥98%
UV/Vis.: λ_{max}: 245 nm
Supplied as: A crystalline 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-1661010 is supplied as a crystalline solid. A stock solution may be made by dissolving the JNJ-1661010 in the solvent of choice, which should be purged with an inert gas. JNJ-1661010 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of JNJ-1661010 in these solvents is approximately 1.5, 20, and 25 mg/ml, respectively.

JNJ-1661010 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, JNJ-1661010 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. JNJ-1661010 has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Fatty acid amide hydrolase (FAAH) degrades N-acyl ethanolamines, including the endocannabinoid arachidonoyl ethanolamide (AEA). JNJ-1661010 is a selective inhibitor of FAAH (IC₅₀s = 34 and 33 nM in rat and human, respectively) that is able to cross the blood-brain barrier.¹ At 20 mg/kg, JNJ-1661010 has been shown to elevate levels of AEA in rat brain.¹ This compound has been used to examine the contribution of endocannabinoid signaling in experimental fibrosis.²

References

1. Keith, J.M., Apodaca, R., Xiao, W., *et al.* Thiadiazolopiperazinyl ureas as inhibitors of fatty acid amide hydrolase. *Bioorg. Med. Chem. Lett.* **18(17)**, 4838-4843 (2008).
2. Palumbo-Zerr, K., Horn, A., Distler, A., *et al.* Inactivation of fatty acid amide hydrolase exacerbates experimental fibrosis by enhanced endocannabinoid-mediated activation of CB₁. *Ann. Rheum. Dis.* **71**, 2051-2054 (2012).

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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