

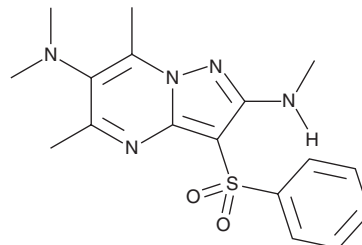
PRODUCT INFORMATION



AVN-492

Item No. 28079

CAS Registry No.: 1220646-23-0
Formal Name: N²,N⁶,N⁶,5,7-pentamethyl-3-(phenylsulfonyl)-pyrazolo[1,5-a]pyrimidine-2,6-diamine
MF: C₁₇H₂₁N₅O₂S
FW: 359.4
Purity: ≥98%
UV/Vis.: λ_{max}: 247 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

AVN-492 is supplied as a crystalline solid. A stock solution may be made by dissolving the AVN-492 in the solvent of choice, which should be purged with an inert gas. AVN-492 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). AVN-492 has a solubility of approximately 1 mg/ml in ethanol and 25 mg/ml in DMSO and DMF.

AVN-492 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AVN-492 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. AVN-492 has a solubility of approximately 0.04 mg/ml in a 1:20 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

AVN-492 is an antagonist of the serotonin (5-HT) receptor subtype 5-HT₆ (K_i = 0.09 nM).¹ It selectively inhibits the 5-HT₆ receptor over the 5-HT_{2B} receptor (IC₅₀s = 0.19 and 268 nM, respectively, in a radioligand binding assay). AVN-492 inhibits increases in cAMP levels induced by 5-HT in HEK293 cells expressing the 5-HT₆ receptor (IC₅₀ = 1.5 nM). It increases the time spent in the open arms of the elevated plus maze in rats, indicating anxiolytic activity, when administered at a dose of 0.2 mg/kg. AVN-492 (1 mg/kg) also prevents memory deficits induced by the NMDA receptor antagonist MK-801 in a passive avoidance test.

Reference

1. Ivachtchenko, A.V., Okun, I., Aladinskiy, V., *et al.* AVN-492, a novel highly selective 5-HT₆R antagonist: preclinical evaluation. *J Alzheimers Dis.* **58(4)**, 1043-1063 (2017).

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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