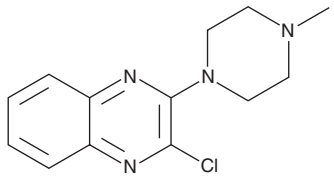
PRODUCT INFORMATION

VUF 10166

Item No. 31423

CAS Registry No.:	155584-74-0
Formal Name:	2-chloro-3-(4-methyl-1-piperazinyl)-quinoxaline
MF:	$C_{13}H_{15}ClN_4$
FW:	262.7
Purity:	≥98%
UV/Vis.:	λ_{max}: 214, 259 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

VUF 10166 is supplied as a solid. A stock solution may be made by dissolving the VUF 10166 in the solvent of choice, which should be purged with an inert gas. VUF 10166 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of VUF 10166 in ethanol is approximately 10 mg/ml and approximately 30 mg/ml in DMSO and DMF.

VUF 10166 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, VUF 10166 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. VUF 10166 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

VUF 10166 is an antagonist of the serotonin (5-HT) receptor subtype 5-HT_{3A} (K_i = 0.04 nM).[1] It is selective for 5-HT_{3A} over 5-HT_{3AB} receptors in radioligand binding assays (K_i = 2 nM), as well as α7 nicotinic acetylcholine receptors (nAChRs) at 100 µM. VUF 10166 also acts as a partial agonist at 5-HT_{3A} receptors (EC_{50} = 5 µM in a patch-clamp assay using *Xenopus* oocytes expressing the human receptor).

Reference

1. Thompson, A.J., Verheij, M.H.P., de Esch, I.J.P., *et al.* VUF10166, a novel compound with differing activities at 5-HT_{3A} and 5-HT_{3AB} receptors. *J. Pharmacol. Exp. Ther.* **341(2)**, 350-359 (2012).

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