PRODUCT INFORMATION



PF-2545920

Item No. 18266

CAS Registry No.: Formal Name:	898562-94-2 2-[[4-[1-methyl-4-(4-pyridinyl)-1H-pyrazol-		N—N
	3-yl]phenoxy]methyl]-quinoline		
MF:	$C_{25}H_{20}N_4O$		\sim
FW:	392.5		Ī
Purity:	≥98%		\downarrow
UV/Vis.:	λ _{max} : 233, 317 nm	(\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	\square
Supplied as:	A crystalline solid		
Storage:	-20°C		N/
Stability:	≥4 years		
1 6 11			

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

PF-2545920 is supplied as a crystalline solid. A stock solution may be made by dissolving the PF-2545920 in the solvent of choice. PF-2545920 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of PF-2545920 in these solvents is approximately 0.5, 15, and 30 mg/ml, respectively.

PF-2545920 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PF-2545920 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. PF-2545920 has a solubility of approximately 0.05 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

PF-2545920 is a potent inhibitor of phosphodiesterase 10A (PDE10A; $IC_{50} = 1.26$ nM for the human recombinant enzyme).¹ It is selective for PDE10A over other PDEs with IC_{50} values ranging from 1.7 to >10 μM. In vivo, PF-2545920 (0.1-3 mg/kg, i.p.) increases cAMP and cGMP production as well as phosphorylation of CREB and GluR1 in mouse striatum in a dose-dependent manner. It reduces climbing behavior induced by apomorphine (Item No. 16094) in mice (ID₅₀ = 0.375 mg/kg) and disrupts the conditioned avoidance response in mice and rats (ID₅₀s = 0.441 and 1.079 mg/kg, respectively). PF-2545920 reverses deficits in prepulse inhibition and social odor recognition induced by (+)-MK-801 (Item No. 10009019) in rats.

Reference

1. Grauer, S.M., Pulito, V.L., Navarra, R.L., et al. Phosphodiesterase 10A inhibitor activity in preclinical models of the positive, cognitive, and negative symptoms of schizophrenia. J. Pharmacol. Exp. Ther. 331(2), 574-590 (2009).

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.

WARRANTY AND LIMITATION OF REMEDY

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