

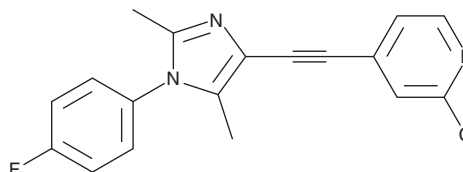
PRODUCT INFORMATION



RG-7090

Item No. 36806

CAS Registry No.: 802906-73-6
Formal Name: 2-chloro-4-[2-[1-(4-fluorophenyl)-2,5-dimethyl-1H-imidazol-4-yl]ethynyl]-pyridine
Synonyms: Basimglurant, RO4917523
MF: C₁₈H₁₃ClFN₃
FW: 325.8
Purity: ≥98%
UV/Vis.: λ_{max}: 236, 321 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

RG-7090 is supplied as a solid. A stock solution may be made by dissolving the RG-7090 in the solvent of choice, which should be purged with an inert gas. RG-7090 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of RG-7090 in these solvents is approximately 0.5 and 3 mg/ml, respectively. RG-7090 is slightly soluble in ethanol.

Description

RG-7090 is a negative allosteric modulator of metabotropic glutamate receptor 5 (mGluR5).¹ It binds to mGluR5 (K_i = 35.6 nM) and is selective for mGluR5 over a panel of 116 additional receptors at 10 μM. RG-7090 inhibits quisqualate-induced calcium mobilization and inositol phosphate accumulation in HEK293 cells expressing human mGluR5 (IC₅₀s = 7 and 5.9 nM, respectively). *In vivo*, RG-7090 (10 and 30 mg/kg) reduces immobility time in the forced swim test in rats. It increases drinking time in the Vogel conflict drinking test and reduces stress-induced hyperthermia, indicating anxiolytic-like activity, in rats. RG-7090 (0.1-10 mg/kg, s.c.) inhibits surgical sciatic nerve constriction-induced cold allodynia in rats. It also increases the threshold of bladder filling volume to trigger the micturition reflex in anesthetized rats.

Reference

1. Lindemann, L., Porter, R.H., Scharf, S.H., *et al.* Pharmacology of basimglurant (RO4917523, RG7090), a unique metabotropic glutamate receptor 5 negative allosteric modulator in clinical development for depression. *J. Pharmacol. Exp. Ther.* **353**(1), 213-233 (2015).

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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