

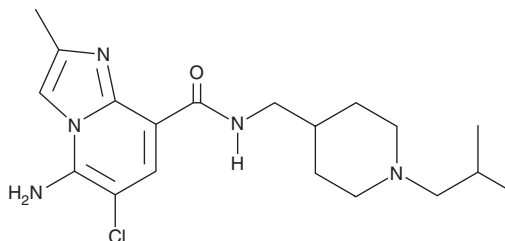
PRODUCT INFORMATION



CJ-033466

Item No. 42394

CAS Registry No.: 519148-48-2
Formal Name: 5-amino-6-chloro-2-methyl-N-[[1-(2-methylpropyl)-4-piperidinyl]methyl]-imidazo[1,2-a]pyridine-8-carboxamide
MF: C₁₉H₂₈ClN₅O
FW: 377.9
Purity: ≥98%
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

CJ-033466 is supplied as a solid. A stock solution may be made by dissolving the CJ-033466 in the solvent of choice, which should be purged with an inert gas. CJ-033466 is sparingly soluble (1-10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in ethanol.

Description

CJ-033466 is a partial agonist of the serotonin (5-HT) receptor subtype 5-HT₄.¹ It induces cAMP accumulation in HEK293 cells expressing human 5-HT_{4D} receptors and relaxation of rat tunica muscularis mucosae strips (EC₅₀s = 0.927 and 1.3 nM, respectively). CJ-033466 selectively binds to 5-HT_{4D} over 5-HT_{1A}, 5-HT_{1B}, 5-HT_{1D}, 5-HT_{2A}, and 5-HT_{2B} receptors (K_is = 1.26, >4,820, >5,070, 2,150, 1,400, and 2,900 nM, respectively) and 5-HT₃, 5-HT₇, and dopamine D₂ receptors (K_is = 4,590, >3,890, and 2,150 nM, respectively), as well as a panel of greater than 50 additional receptors at 1,000 nM. CJ-033466 (0.3 mg/kg) increases gastric antral motility in conscious dogs in the fasted or postprandial states. It reverses clonidine-induced decreases in gastric emptying in a dog model of gastroparesis. CJ-033466 also induces superoxide production in a light-dependent manner and is phototoxic to NIH3T3 fibroblasts (IC₅₀s = 11.4 and 203.3 µg/ml in the presence and absence of light, respectively).²

References

1. Mikami, T., Ochi, Y., Suzuki, K., *et al.* 5-Amino-6-chloro-N-[[1-isobutylpiperidin-4-yl)methyl]-2-methylimidazo[1,2-a]pyridine-8-carboxamide (CJ-033,466), a novel and selective 5-hydroxytryptamine₄ receptor partial agonist: Pharmacological profile in vitro and gastropromkinetic effect in conscious dogs. *J. Pharmacol. Exp. Ther.* **325**(1), 190-199 (2008).
2. Onoue, S., Igarashi, N., Yamauchi, Y., *et al.* In vitro phototoxic potential and photochemical properties of imidazopyridine derivative: A novel 5-HT₄ partial agonist. *J. Pharm. Sci.* **97**(10), 4307-4318 (2008).

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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