

Product Name	: Befiradol
Synonyms	: F 13640; NLX 112
Cat No.	: M13242
CAS Number	: 208110-64-9
Molecular Formula	: C ₂₀ H ₂₂ ClF ₂ N ₃ O
Formula Weight	: 393.86
Chemical Name	: (3-chloro-4-fluorophenyl)-[4-fluoro-4-[[[(5-methylpyridin-2-yl)methylamino]methyl]piperidin-1-yl]methanone
Description	Befiradol (F13640, NLX 112) is a highly potent, selective 5-HT_{1A} receptor agonist with K_i of 2.7 nM; exhibits agonist efficacy greater than for (±)8-OH-DPAT or buspirone; stimulates 'total G-proteins', but unlike (±)8-OH-DPAT and buspirone, more potent for G_{qo} activation, in rat hippocampal membranes; dose-dependently decreases extracellular 5-HT in the hippocampus and mPFC in rats, activates both 5-HT(1A) autoreceptors and postsynaptic 5-HT(1A) receptors in prefrontal cortex with a similar potency. Pain Discontinued
Pathway	: Endocrinology/Hormones
Target	: 5-HT Receptor
Receptor	: 5-HT Receptor
Solubility	: —
SMILES	: <chem>O=C(C1=CC=C(F)C(Cl)=C1)N2CCC(CN(C3=NC=C(C)C=C3)C(F)CC2</chem>
Storage	: (-20°C)
Stability	: ≥ 2 years
Reference	:

1. Bollinger S, et al. J Med Chem. 2010 Oct 14;53(19):7167-79. | 2. Lladó-Pelfort L, et al. Psychopharmacology (Berl). 2012 May;221(2):261-72. | 3. Newman-Tancredi A, et al. J Pharm Pharmacol. 2017 Sep;69(9):1178-1190.