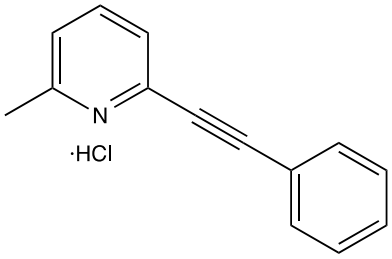
# Catalog # 10-4007
# MPEP HCl
**CAS# 219911-35-0**

2-Methyl-6-(2-phenylethynyl)pyridine hydrochloride

Lot # FBS1048




MPEP is a potent ($IC_{50}$ = 36 nM for quisqualate-stimulated phosphoinositide hydrolysis) and selective (over mGlu1b, -2, -3, -4a, -6, -7b, and -8a) antagonist of the metabotropic glutamate receptor subtype 5 (mGlu5).[1] It is a positive allosteric modulator of human mGlu4.[2] MPEP inhibition of mGlu5 has been studied for the treatment of many CNS disorders including Parkinson's[3,4], Fragile X syndrome[5], and addiction[6].


1) Gasparini *et al.* (1999) *2-Methyl-6-(phenylethynyl)-pyridine (MPEP), a potent, selective, and systemically active mGlu5 receptor antagonist;* Neuropharmacology **38** 1493
2) Mathiesen *et al.* (2003) *Positive allosteric modulation of the human metabotropic glutamate receptor 4(hmGlu4) by SIB-1893 and MPEP;* Br. J . Pharmacol. **138** 1026
3) Morin *et al.* (2010) *Effect of metabotropic glutamate receptor type 5 antagonists MPEP and MTEP in parkinsonian monkeys;* Neuropharmacology **58** 981
4) Morin *et al.* (2013) *MPEP, an mGlu5 receptor antagonist, reduces the development of L-DOPA-induced motor complications in de novo parkinsonian monkeys: biochemical correlates;* Neuropharmacology **66** 355
5) Michalon *et al.* (2012) *Chronic pharmacological mGlu5 inhibition corrects fragile X in adult mice;* Neuron **74** 49
6) Mihov and Hasler (2016) *Negative Allosteric Modulators of Metabotropic Glutamate Receptors Subtype 5 in Addiction: a Therapeutic Window;* Int. J. Neuropsychopharmacol. **19** pyw002


## PHYSICAL DATA

| | |
|---|---|
| Molecular Weight: | 229.71 |
| Molecular Formula: | $C_{14}H_{11}N{\cdot}HCl$ |
| Purity: | >98% by HPLC |
| | NMR: (Conforms) |
| Solubility: | DMSO (20 mg/ml) and ethanol (20 mg/mL) |
| Physical Description: | White to very pale yellow solid |
| Storage and Stability: | Store as supplied at -20ºC for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month. |

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