Product Name: MPEP hydrochloride
CAS Number: 219911-35-0
IUPAC Name: 2-Methyl-6-(phenylethynyl)pyridine hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{14}\text{H}_{11}\text{N} \cdot \text{HCl} \)
Batch Molecular Weight: 229.71
Physical Appearance: White solid
Solubility: water to 5 mM with gentle warming
ethanol to 100 mM
DMSO to 100 mM
Storage: Desiccate at +4°C

2. ANALYTICAL DATA

TLC: \( R_f = 0.4 \) (Ether:Hexane [1:2])
Melting Point: Between 149 - 151°C
HPLC: Shows 99.9% purity
\(^1\text{H} \) NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

<table>
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<tr>
<th></th>
<th>Carbon</th>
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<th>Nitrogen</th>
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<td>6.1</td>
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</table>
**Product Information**

**Product Name:** MPEP hydrochloride  
**Catalog No.:** 1212  
**Batch No.:** 10  
**CAS Number:** 219911-35-0  
**IUPAC Name:** 2-Methyl-6-(phenylethynyl)pyridine hydrochloride

**Description:** Potent and highly selective non-competitive antagonist at the mGlu_{5} receptor subtype (IC\textsubscript{50} = 36 nM) and a positive allosteric modulator at mGlu_{5} receptors. Centrally active following systemic administration in vivo. Reverses mechanical hyperalgesia in the inflamed rat hind paw. Also available as part of the Group I mGlu Receptor Tocriset™.

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C\textsubscript{14}H\textsubscript{11}N.HCl
- **Batch Molecular Weight:** 229.71
- **Physical Appearance:** White solid
- **Minimum Purity:** >99%
- **Batch Molecular Structure:**

```
Me
\text{C}_6\text{H}_4\text{H}_2
\text{C}≡\text{C}
\text{HCl}
```

**Storage:** Desiccate at +4°C

**Solubility & Usage Info:**
- Water to 5 mM with gentle warming
- Ethanol to 100 mM
- DMSO to 100 mM

**Stability and Solubility Advice:**
- Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).
- Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:
  - **SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.
  - **SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**