

**Product Name:** UB 165 fumarate

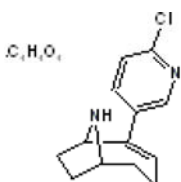
**Catalog No.:** 1348

**Batch No.:** 2

**IUPAC Name:** 2-(6-Chloro-3-pyridinyl)-9-azabicyclo[4.2.1]non-2-ene fumarate

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>13</sub>H<sub>15</sub>ClN<sub>2</sub>·C<sub>4</sub>H<sub>4</sub>O<sub>4</sub>  
**Batch Molecular Weight:** 350.8  
**Physical Appearance:** White solid  
**Solubility:** water to 100 mM with gentle warming  
**Storage:** Desiccate at +4°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.3 (Dichloromethane:Methanol [10:1])  
**Melting Point:** Between 187 - 189°C  
**HPLC:** Shows 99.5% purity  
<sup>1</sup>H NMR: Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	58.21	5.46	7.99
Found	58.12	5.47	7.95

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**Product Name:** UB 165 fumarate

**Catalog No.:** 1348

**Batch No.:** 2

**IUPAC Name:** 2-(6-Chloro-3-pyridinyl)-9-azabicyclo[4.2.1]non-2-ene fumarate

**Description:**

Subtype-selective nicotinic agonist. Full agonist at  $\alpha 3\beta 2$ - and very weak partial agonist at  $\alpha 4\beta 2$ - containing nAChRs.  $K_i$  values are 0.27, 20 ( $IC_{50}$ ), 2790 and 990 nM for  $\alpha 4\beta 2$ ,  $\alpha 3$ ,  $\alpha 7$  and  $\alpha 1\beta 1\delta \epsilon$  respectively.

**Physical and Chemical Properties:**

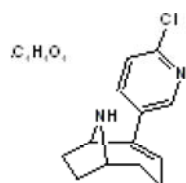
Batch Molecular Formula:  $C_{13}H_{15}ClN_2 \cdot C_4H_4O_4$

Batch Molecular Weight: 350.8

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Desiccate at +4°C

**Solubility & Usage Info:**

water to 100 mM with gentle warming

**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.

**Licensing Information:**

Sold with the permission of the University of Bristol

**References:**

**Cao et al** (2005) Different nicotinic acetylcholine receptor subtypes mediating striatal and prefrontal cortical [3H]DA release. *Neuropharmacology* **48** 72. PMID: 15617729.

**Sharples et al** (2000) UB-165: a novel agonist with subtype selectivity implicates the  $\alpha 4\beta 2$  subtype in the modulation of DA release from rat striatal synaptosomes. *J.Neurosci.* **20** 2783. PMID: 10751429.

**Wright et al** (1997) Synthesis of UB-165: a novel nicotinic ligand and anatoxin-a/epibatidine hybrid. *Bioorg.Med.Chem.Lett.* **7** 2867.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel:+1 612 379 2956