

**Product Name:** Flumazenil

**Catalog No.:** 1328

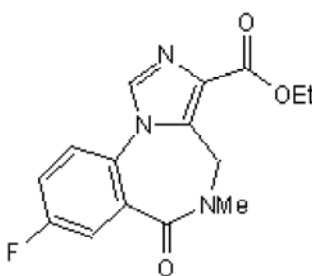
**Batch No.:** 5

CAS Number: 78755-81-4

IUPAC Name: 8-Fluoro-5,6-dihydro-5-methyl-6-oxo-4*H*-imidazo[1,5-*a*][1,4]benzodiazepine-3-carboxylic acid, ethyl ester

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>15</sub>H<sub>14</sub>FN<sub>3</sub>O<sub>3</sub>  
**Batch Molecular Weight:** 303.29  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 25 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 100.0% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	59.4	4.65	13.85
Found	59.31	4.64	13.82

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

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**Description:**

Benzodiazepine antagonist, non-selective for  $\alpha_1$ ,  $\alpha_2$ ,  $\alpha_3$  or  $\alpha_5$ -containing GABA<sub>A</sub> receptors. Centrally active upon systemic administration in vivo. Also inhibits repressor element-1 silencing transcription factor (REST) by targeting degradation.

**Physical and Chemical Properties:**

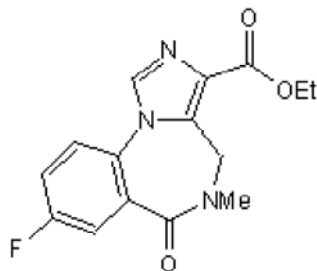
Batch Molecular Formula: C<sub>15</sub>H<sub>14</sub>FN<sub>3</sub>O<sub>3</sub>

Batch Molecular Weight: 303.29

Physical Appearance: White solid

**Minimum Purity:** ≥99%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 25 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:**

**Atack et al** (1999) Regional differences in the inhibition of mouse in vivo [<sup>3</sup>H]Ro 15-1788 binding reflect selectivity for  $\alpha_1$  versus  $\alpha_2$  and  $\alpha_3$  subunit-containing GABA<sub>A</sub> receptors. *Neuropsychopharmacology* **20** 255. PMID: 10063485.

**Dobl** (1999) New insights into the mechanism of action of hypnotics. *J. Psychopharmacol.* **13** S11. PMID: 10667451.

**Polc et al** (1981) Electrophysiological studies on the specific benzodiazepine antagonist Ro 15-1788. *Naunyn Schmiedebergs Arch. Pharmacol.* **316** 317. PMID: 7196507.

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