

Flumazenil

Catalog No: tcsc0629



Available Sizes

Size: 50mg

Size: 100mg



Specifications

CAS No:

78755-81-4

Formula:

$C_{15}H_{14}FN_3O_3$

Pathway:

Neuronal Signaling;Membrane Transporter/Ion Channel

Target:

GABA Receptor;GABA Receptor

Purity / Grade:

>98%

Solubility:

DMSO : 20 mg/mL (65.94 mM; Need ultrasonic)

Alternative Names:

Ro 15-1788

Observed Molecular Weight:

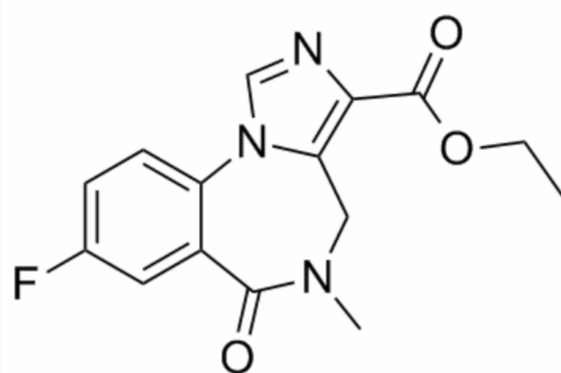
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Product Description

Flumazenil is a competitive **GABAA receptor** antagonist, used in the treatment of benzodiazepine overdoses.

In Vivo:

Flumazenil interacts at the central benzodiazepine receptor to antagonize or reverse the behavioral, neurologic, and electrophysiologic effects of benzodiazepine agonists and inverse agonists. Flumazenil is of some benefit in hepatic encephalopathy, but until well-designed clinical trials are conducted, hepatic encephalopathy must be considered an investigational indication for flumazenil. Flumazenil has been shown to reverse sedation caused by intoxication with benzodiazepines alone or benzodiazepines in combination with other agents, but it should not be used when cyclic antidepressant intoxication is suspected^[1]. Flumazenil (1 mg/kg) induces a strong anxiolytic effect in BALB/c mice tested in the elevated plus maze and light/dark test^[2]. Flumazenil (10 mg/kg) effectively prevents the reduction produced by allopregnanolone in rats^[3]. Flumazenil (5-20 mg/kg) antagonizes the anticonvulsant and adverse effects of diazepam but not GYKI 52466 in mice. Flumazenil slightly reduces the anticonvulsant activity of NBQX in the MES model but not in the PTZ test^[4]. Flumazenil (3.0 mg/kg) blocks the changes withdrawal from chronic ethanol treatment, which leads to a decrease in open arm time and percent open arm entries^[5].



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