

Certificate of Analysis

Product Name: Etifoxine hydrochloride

Catalog No.: 3113

Batch No.: 1

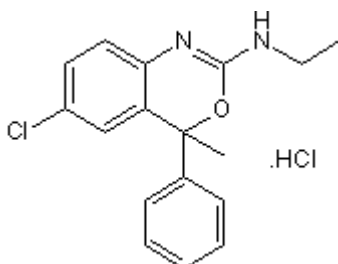
CAS Number: 56776-32-0

EC Number: 260-380-0

IUPAC Name: 6-Chloro-2-*N*-ethyl-4-methyl-4-phenyl-4*H*-3,1-benzoxazin-2-amine hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₇H₁₇ClN₂O.HCl.½H₂O
Batch Molecular Weight: 346.25
Physical Appearance: White solid
Solubility: DMSO to 100 mM
water to 5 mM with gentle warming
ethanol to 100 mM
Storage: Desiccate at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

Melting Point: Between 133 - 134°C
HPLC: Shows 99.7% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	58.97	5.53	8.09
Found	58.79	5.45	8.09

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

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Description:

Potentiator of GABA_A receptor function in cultured neurons. Preferentially acts on β₂ or β₃ subunit-containing GABA_A receptors. Exhibits anxiolytic activity in rodents and humans with no sedative, myorelaxant or mnesic side effects. Acts as a ligand of the translocator protein (TSPO); promotes axonal regeneration.

Physical and Chemical Properties:

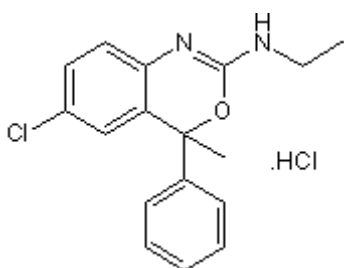
Batch Molecular Formula: C₁₇H₁₇ClN₂O.HCl.½H₂O

Batch Molecular Weight: 346.25

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Desiccate at +4°C

Solubility & Usage Info:

DMSO to 100 mM

water to 5 mM with gentle warming

ethanol 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:

Girard *et al* (2008) Etifoxine improves peripheral nerve regeneration and functional recovery. *Proc.Natl.Acad.Sci.* **105** 20505.

Hamon *et al* (2003) The modulatory effects of the anxiolytic etifoxine on GABA_A receptors are mediated by the β subunit. *Neuropharmacology* **45** 293. PMID: 12871647.

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