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-4H-3,1-benzoxazin-2-amine hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( C_{17}H_{17}ClN_{2}O.HCl.\frac{1}{2}H_{2}O \)
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

2. ANALYTICAL DATA

Melting Point: Between 133 - 134°C
HPLC: Shows 99.7% purity
\(^1\)H 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<sub>α</sub> receptor function in cultured neurons. Preferentially acts on β<sub>2</sub> or β<sub>3</sub> subunit-containing GABA<sub>α</sub> 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: C<sub>17</sub>H<sub>17</sub>ClN<sub>2</sub>O.HCl.½H<sub>2</sub>O
Batch Molecular Weight: 346.25
Physical Appearance: White solid
Minimum Purity: >99%

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:
Hamon et al (2003) The modulatory effects of the anxiolytic etifoxine on GABA<sub>α</sub> receptors are mediated by the β subunit. Neuropharmacology 45 293. PMID: 12871647.