

Certificate of Analysis

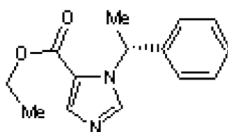
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Product Name: Etomidate
CAS Number: 33125-97-2
IUPAC Name: (R)-1-(1-Phenylethyl)-1*H*-imidazole-5-carboxylic acid ethyl ester

Catalog No.: 1471
Batch No.: 1
EC Number: 251-385-9

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₄H₁₆N₂O₂
Batch Molecular Weight: 244.29
Physical Appearance: White solid
Solubility: ethanol to 100 mM
 1eq. HCl to 50 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.41 (Dichloromethane:Methanol:Ammonia soln. [10:1:0.1])
Melting Point: At 72°C
HPLC: Shows 99.8% purity
¹H NMR: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	68.83	6.6	11.47
Found	68.75	6.59	11.42

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

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Description:

Etomidate is a general anesthetic with GABA modulatory and GABA-mimetic actions; selectively interacts with β 2- and β 3-subunit containing GABA_A receptors. Short acting and potent hypnotic, with low toxicity.

Physical and Chemical Properties:

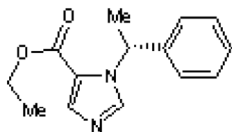
Batch Molecular Formula: C₁₄H₁₆N₂O₂

Batch Molecular Weight: 244.29

Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

ethanol to 100 mM

1eq. HCl to 50 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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

Moody et al (1998) Distinct structural requirements for the direct and indirect actions of the anaesthetic EtoM. at GABA_A receptors. *Toxicol.Lett.* **100-101** 209. PMID: 10049144.

Belelli et al (1997) The interaction of the general anesthetic EtoM. with the γ -aminobutyric acid type A receptor is influenced by a single amino acid. *Proc.Natl.Acad.Sci.U.S.A.* **94** 11031. PMID: 9380754.

Giese et al (1983) EtoM.: a new intravenous anesthetic induction agent. *Pharmacother.* **3** 251. PMID: 6359080.

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