

## Certificate of Analysis

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**Product Name:** Etodolac

**Catalog No.:** 3871

**Batch No.:** 1

**CAS Number:** 41340-25-4

**IUPAC Name:** (RS)-2-(1,8-Diethyl-4,9-dihydro-3H-pyrano[3,4-b]indol-1-yl)acetic acid

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**

C<sub>17</sub>H<sub>21</sub>NO<sub>3</sub>

**Batch Molecular Weight:**

287.35

**Physical Appearance:**

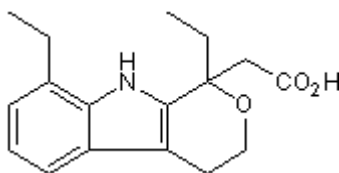
**Solubility:**

DMSO to 100 mM  
ethanol to 100 mM

**Storage:**

Store at +4°C

**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:**

Shows 99.7% purity

**<sup>1</sup>H NMR:**

Consistent with structure

**Mass Spectrum:**

Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	71.06	7.37	4.87
Found	70.89	7.36	4.93

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

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**Description:**

Non-steroidal anti-inflammatory drug (NSAID) that selectively inhibits cyclooxygenase-2 (COX-2) (IC<sub>50</sub> values are 53 and >100 µM for COX-2 and COX-1 respectively). Displays anti-inflammatory effects in both adjuvant arthritic and normal rats.

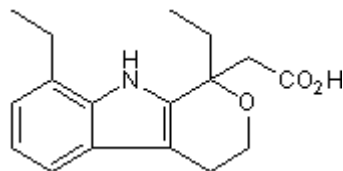
**Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>17</sub>H<sub>21</sub>NO<sub>3</sub>

Batch Molecular Weight: 287.35

Physical Appearance:

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM

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:**

**Kato *et al*** (2001) Cyclooxygenase-1 and cyclooxygenase-2 selectivity of non-steroidal anti-inflammatory drugs: investigation using human peripheral monocytes. *J.Pharm.Pharmacol.* **53** 1679. PMID: 11804398.

**Tachibana *et al*** (2003) Anti-inflammatory effect and low ulcerogenic activity of etodolac, a cyclooxygenase-2 selective non-steroidal anti-inflammatory drug, on adjuvant-induced arthritis in rats. *Pharmacology* **68** 96. PMID: 12711837.

**Shi *et al*** (2004) Pharmacokinetic difference between S-(+)- and R-(-)-etodolac in rats. *Acta Pharmacol.Sinica* **25** 996.

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