

Certificate of Analysis

www.tocris.com

Product Name: Felbamate

CAS Number: 25451-15-4

IUPAC Name: 2-Phenyl-1,3-propanedioldicarbamate

Catalog No.: 0869

Batch No.: 3

EC Number: 247-001-4

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{11}H_{14}N_2O_4 \cdot 0.33H_2O$

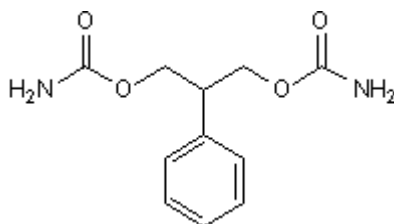
Batch Molecular Weight: 244.2451

Physical Appearance: White solid

Solubility: DMSO to 100 mM
ethanol to 100 mM

Storage: Store at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: $R_f = 0.5$ (Chloroform:Methanol [9:1])

Melting Point: Between 155 - 159°C

HPLC: Shows >99.3% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

Carbon Hydrogen Nitrogen

Theoretical 54.11 6.05 11.47

Found 53.73 5.69 11.44

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

Product Information

www.tocris.com

Product Name: Felbamate

CAS Number: 25451-15-4

IUPAC Name: 2-Phenyl-1,3-propanedioldicarbamate

Catalog No.: 0869

Batch No.: 3

EC Number: 247-001-4

Description:

Anticonvulsant, acting as an antagonist at the NMDA-associated glycine binding site.

Physical and Chemical Properties:

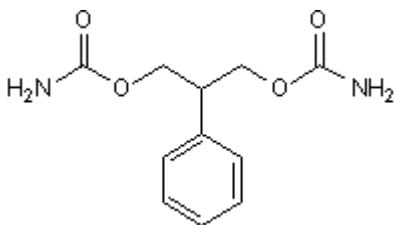
Batch Molecular Formula: C₁₁H₁₄N₂O₄.0.33H₂O

Batch Molecular Weight: 244.2451

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at RT

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:

Coffin et al (1994) Selective antagonism of the anticonvulsant effects of felbamate by glycine. *Eur.J.Pharmacol.* **256** R9. PMID: 8050461.

De Sarro et al (1994) Excitatory amino acid neurotransmission through both NMDA and non-NMDA receptors is involved in the anticonvulsant activity of felbamate in DBA/2 mice. *Eur.J.Pharmacol.* **262** 11. PMID: 7529182.

Serra et al (1994) Felbamate antagonises isoniazid- and FG7142-induced reduction of GABA_A receptor function in the mouse brain. *Eur.J.Pharmacol.* **265** 185. PMID: 7875235.

Upton (1994) Mechanisms of action of new antiepileptic drugs: rational design and serendipitous findings. *TIPS* **15** 456. PMID: 7886818.

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

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956