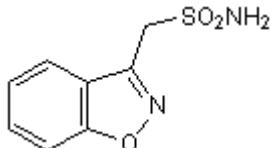


Product Name: Zonisamide**Catalog No.:** 2625**Batch No.:** 1

CAS Number: 68291-97-4

IUPAC Name: 1,2-Benzisoxazole-3-methanesulfonamide

1. PHYSICAL AND CHEMICAL PROPERTIES**Batch Molecular Formula:** C₈H₈N₂O₃S**Batch Molecular Weight:** 212.22**Physical Appearance:** White crystalline solid**Solubility:**
water to 10 mM
1.1eq. NaOH to 100 mM
DMSO to 100 mM
ethanol to 25 mM**Storage:** Store at +4°C**Batch Molecular Structure:****2. ANALYTICAL DATA****Melting Point:** Between 164 - 166°C**HPLC:** Shows >99.6% purity**¹H NMR:** Consistent with structure**Mass Spectrum:** Consistent with structure**Microanalysis:** Carbon Hydrogen Nitrogen

Theoretical 45.28 3.8 13.2

Found 45.09 3.72 13.06

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

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Product Name: Zonisamide

Catalog No.: 2625

Batch No.: 1

CAS Number: 68291-97-4

IUPAC Name: 1,2-Benzisoxazole-3-methanesulfonamide

Description:

Antiepileptic that possesses a broad spectrum anticonvulsant and mechanistic profile. Blocks voltage-sensitive Na^+ and T-type Ca^{2+} channels, stimulates BK_{Ca} channels, modulates GABA, glutamate and monoamine neurotransmission, inhibits lipid peroxidation and scavenges hydroxyl and nitric oxide free radicals. Displays neuroprotective and antiParkinsonian activity.

Physical and Chemical Properties:

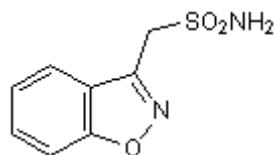
Batch Molecular Formula: $\text{C}_8\text{H}_8\text{N}_2\text{O}_3\text{S}$

Batch Molecular Weight: 212.22

Physical Appearance: White crystalline solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

water to 10 mM
1.1eq. NaOH to 100 mM
DMSO to 100 mM
ethanol to 25 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:

Tokumaru et al (2000) In vivo evaluation of hippocampal anti-oxidant ability of zonisamide in rats. *Neurochem.Res.* **25** 1107. PMID: 11055748.

Sobieszek et al (2003) Zonisamide: a new antiepileptic drug. *Pol.J.Pharmacol.* **55** 683. PMID: 14704463.

Gluck et al (2004) Novel dopamine releasing response of an anti-convulsant agent with possible anti-Parkinson's activity. *J.Neural Transm.* **111** 713. PMID: 15168218.

Huang et al (2007) Activation by Zonisamide, a newer antiepileptic drug, of large-conductance calcium-activated potassium channel in differentiated hippocampal neuron-derived H19-7 cells. *J.Pharmacol.Exp.Ther.* **321** 98. PMID: 17255467.

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