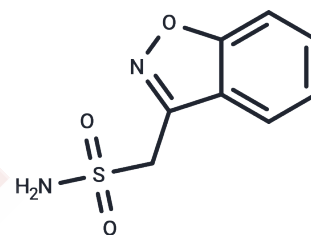


## Zonisamide

## Chemical Properties

CAS No. :	68291-97-4
Formula:	C <sub>8</sub> H <sub>8</sub> N <sub>2</sub> O <sub>3</sub> S
Molecular Weight:	212.23
Appearance:	no data available
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year



## Biological Description

Description	Zonisamide (AD 810), a sulfonamide anticonvulsant, is approved for use as an adjunctive treatment in adults with partial-onset seizures. It may inhibit a carbonic anhydrase although this is not one of the main mechanisms of action. Zonisamide may act by blocking repetitive firing of voltage-gated sodium channels results in a reduction of T-type calcium channel currents, or by binding allosterically to GABA receptors. This latter action may lower the uptake of the inhibitory neurotransmitter GABA while increasing the uptake of the excitatory neurotransmitter glutamate.
Targets(IC50)	Calcium Channel,Carbonic Anhydrase,Sodium Channel
In vitro	Zonisamide inhibits monoamine oxidase B activity in vitro with an IC50 of 25 µM.
In vivo	Zonisamide inhibits monoamine oxidase B activity in vitro with an IC50 of 25 µM.

## Solubility Information

Solubility	DMSO: 55 mg/mL (259.15 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.7119 mL	23.5593 mL	47.1187 mL
5 mM	0.9424 mL	4.7119 mL	9.4237 mL
10 mM	0.4712 mL	2.3559 mL	4.7119 mL
50 mM	0.0942 mL	0.4712 mL	0.9424 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

### Reference

Sonsalla PK, et al. Exp Neurol, 2010, 221(2), 329-334.

Tian J, Wu Q, He Y, et al. Zonisamide, an antiepileptic drug, alleviates diabetic cardiomyopathy by inhibiting endoplasmic reticulum stress. Acta Pharmacologica Sinica. 2021, 42(3): 393-403.

Tanabe M, et al. Naunyn Schmiedebergs Arch Pharmacol, 2005, 372(2), 107-114.

Hayakawa T, et al. Eur J Pharmacol, 1994, 257(1-2), 131-136.

Ueda Y, et al. Brain Res Mol Brain Res, 2003, 116(1-2), 1-6.

Okada M, et al. Br J Pharmacol, 1998, 124(6), 1277-1285.

Tian J, Wu Q, He Y, et al. Zonisamide, an antiepileptic drug, alleviates diabetic cardiomyopathy by inhibiting endoplasmic reticulum stress[J]. Acta Pharmacologica Sinica. 2020: 1-11.

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