



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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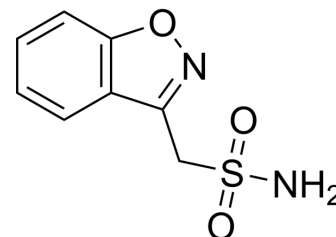
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## Zonisamide (Standard)

<b>Cat. No.:</b>	HY-B0124R
<b>CAS No.:</b>	68291-97-4
<b>Molecular Formula:</b>	C <sub>8</sub> H <sub>8</sub> N <sub>2</sub> O <sub>3</sub> S
<b>Molecular Weight:</b>	212.23
<b>Target:</b>	Apoptosis; Carbonic Anhydrase
<b>Pathway:</b>	Apoptosis; Metabolic Enzyme/Protease
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Zonisamide (Standard) is the analytical standard of Zonisamide. This product is intended for research and analytical applications. Zonisamide (AD 810) is an orally active carbonic anhydrase inhibitor, with K <sub>s</sub> of 35.2 and 20.6 nM for hCA II and hCA V, respectively. Zonisamide exerts neuroprotective effects through anti-apoptosis and upregulating MnSOD levels. Zonisamide also increases the expression of Hrd1, thereby improving cardiac function in AAC rats. Zonisamide can be used in studies of seizure, parkinson's disease and cardiac hypertrophy <sup>[1][2][3][4]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	Ki: 35.2 nM (hCA II) , 20.6 nM (hCA V) <sup>[4]</sup> .

### REFERENCES

- [1]. Kawajiri S, et al. Zonisamide reduces cell death in SH-SY5Y cells via an anti-apoptotic effect and by upregulating MnSOD. *Neurosci Lett*. 2010 Sep 6;481(2):88-91.
- [2]. Ueda Y, et al. Effect of zonisamide on molecular regulation of glutamate and GABA transporter proteins during epileptogenesis in rats with hippocampal seizures. *Brain Res Mol Brain Res*. 2003 Aug 19;116(1-2):1-6.
- [3]. Wu Q, et al. Zonisamide alleviates cardiac hypertrophy in rats by increasing Hrd1 expression and inhibiting endoplasmic reticulum stress. *Acta Pharmacol Sin*. 2021 Oct;42(10):1587-1597.
- [4]. De Simone G, et al. Carbonic anhydrase inhibitors. Zonisamide is an effective inhibitor of the cytosolic isozyme II and mitochondrial isozyme V: solution and X-ray crystallographic studies. *Bioorg Med Chem Lett*. 2005 May 2;15(9):2315-20.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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