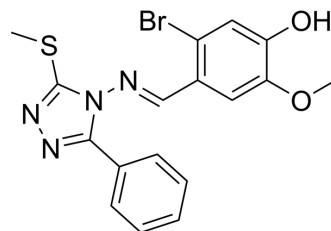


(E/Z)-GO289

Cat. No.:	HY-115519		
CAS No.:	694522-87-7		
Molecular Formula:	C ₁₇ H ₁₅ BrN ₄ O ₂ S		
Molecular Weight:	419.3		
Target:	Casein Kinase		
Pathway:	Cell Cycle/DNA Damage; Stem Cell/Wnt		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 16.67 mg/mL (39.76 mM); ultrasonic and warming and heat to 60°C)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.3849 mL	11.9246 mL	23.8493 mL
	5 mM	0.4770 mL	2.3849 mL	4.7699 mL
	10 mM	0.2385 mL	1.1925 mL	2.3849 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: 1.67 mg/mL (3.98 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 1.67 mg/mL (3.98 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

(E/Z)-GO289 is a potent and selective casein kinase 2 (CK2) inhibitor (IC₅₀=7 nM). (E/Z)-GO289 strongly lengthens circadian period. (E/Z)-GO289 exhibits cell type-dependent inhibition of cancer cell growth that correlated with cellular clock function [1].

In Vitro

(E/Z)-GO289 is a potent and highly selective CK2 inhibitor for modulation of circadian rhythms and cancer cell growth. (E/Z)-GO289 shows an IC₅₀ of 13 μM for PIM2 and is >1000 times higher than that for CK2^[1].
 ?(E/Z)-GO289 (3-9 μM; 2 days) strongly inhibits Caki-2, A498, and 769-P cells^[1].
 ?(E/Z)-GO289 enables manipulation of clock protein phosphorylation and cancer cell growth^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- bioRxiv. 2023 May 12.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Oshima T, et al. Cell-based screen identifies a new potent and highly selective CK2 inhibitor for modulation of circadian rhythms and cancer cell growth. Sci Adv. 2019;5(1):eaau9060. Published 2019 Jan 23.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA