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Lieferung & Zahlungsart

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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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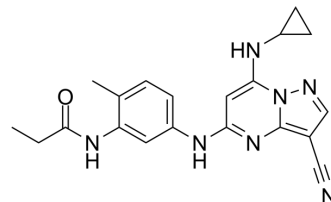
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SGC-CK2-1

Cat. No.:	HY-139004
CAS No.:	2470424-39-4
Molecular Formula:	C ₂₀ H ₂₁ N ₇ O
Molecular Weight:	375.43
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 : 100 mg/mL (266.36 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
		1 mM		2.6636 mL	13.3181 mL	26.6361 mL
		5 mM		0.5327 mL	2.6636 mL	5.3272 mL
		10 mM		0.2664 mL	1.3318 mL	2.6636 mL
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (6.66 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.66 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	SGC-CK2-1 is a highly potent, ATP-competitive, and cell-active CK2 chemical probe with exclusive selectivity for both human CK2 isoforms, with IC ₅₀ s of 36 and 16 nM for CK2α and CK2α' respectively in the nanoBRET assay. SGC-CK2-1 can be used for the research of neurodegenerative diseases ^{[1][2]} .	
IC ₅₀ & Target	CK2α 36 nM (IC ₅₀)	CK2α' 16 nM (IC ₅₀)
In Vitro	SGC-CK2-1 inhibits CSNK2A2 and CSNK2A1 with IC ₅₀ s value of 2.3 and 4.2 nM ^[1] . SGC-CK2-1 inhibits DYRK2 with the IC ₅₀ value of 3.7 μM ^[1] . SGC-CK2-1 inhibits blood U-937, MV4-11, MOLM-13, OCI-LY19, OCI-AML5 cells with IC ₅₀ s of 120, 690, 750, 760 and 810 nM,	

respectively. SGC-CK2-1 inhibits Head/Neck Detroit562 cells with an IC₅₀ of 550 nM. SGC-CK2-1 inhibits Lung NCI-H2286 cells with an IC₅₀ of 550 nM. SGC-CK2-1 inhibits Brain SK-N-MC cells with an IC₅₀ of 730 nM. SGC-CK2-1 inhibits Breast BT-20 cells with an IC₅₀ of 810 nM. SGC-CK2-1 inhibits Skin A375 cells with an IC₅₀ of 830 nM. SGC-CK2-1 inhibits Stomach SNU-1 cells with an IC₅₀ of 860 nM. SGC-CK2-1 inhibits Duodenum Hutu 80 cells with an IC₅₀ of 920 nM^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Carrow I Wells, et al. Development of a potent and selective chemical probe for the pleiotropic kinase CK2. Cell Chem Biol. 2021 Apr 15;28(4):546-558.e10.
- [2]. Marco P Licciardello, et al. A New Chemical Probe Challenges the Broad Cancer Essentiality of CK2. Trends Pharmacol Sci. 2021 May;42(5):313-315.
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Caution: Product has not been fully validated for medical applications. For research use only.

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