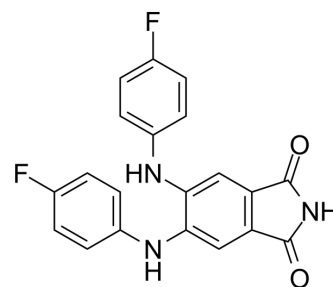


CGP-53353

Cat. No.:	HY-108600		
CAS No.:	145915-60-2		
Molecular Formula:	C ₂₀ H ₁₃ F ₂ N ₃ O ₂		
Molecular Weight:	365.33		
Target:	PKC; DNA/RNA Synthesis		
Pathway:	Epigenetics; TGF-beta/Smad; Cell Cycle/DNA Damage		
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 : ≥ 50 mg/mL (136.86 mM)

* "≥" means soluble, but saturation unknown.

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.7373 mL	13.6863 mL	27.3725 mL
	5 mM	0.5475 mL	2.7373 mL	5.4745 mL
	10 mM	0.2737 mL	1.3686 mL	2.7373 mL

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

BIOLOGICAL ACTIVITY

Description

CGP-53353 (DAFH-7) is a potent PKC inhibitor with IC₅₀s of 0.41 μM and 3.8 μM for PKCβII and PKCβI, respectively. CGP-53353 can inhibit glucose-induced cell proliferation and DNA synthesis in AoSMC and A10 cells. CGP-53353 can be used for researching atherosclerosis of diabetic patients^[1].

IC₅₀ & Target

PKCβII	PKCβI
0.41 mM (IC ₅₀)	3.8 mM (IC ₅₀)

In Vitro

CGP-53353 (DAFH-7) (1 μM; 48-96 hours) inhibits glucose-induced cell proliferation in A10 cells^[1].

CGP-53353 (1 μM ; 0-48 hours) inhibits the glucose-induced increase and acceleration of DNA synthesis in A10, also blocks the glucose-induced increase of S-phase cell percentage^[1].

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

Cell Proliferation Assay

Cell Line:	A10 (cell proliferation induced by glucose) ^[1]
Concentration:	1 μ M
Incubation Time:	48-96 hours
Result:	Inhibited glucose-induced cell proliferation, although A10 cell proliferation was stimulated by increasing glucose concentrations.

REFERENCES

[1]. Yamamoto M, et al. Acute glucose-induced downregulation of PKC- β 1 accelerates cultured VSMC proliferation. Am J Physiol Cell Physiol. 2000;279(3):C587-C595.

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

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