PKG1α activator 3

Cat. No.: HY-151203

CAS No.: 2773367-58-9

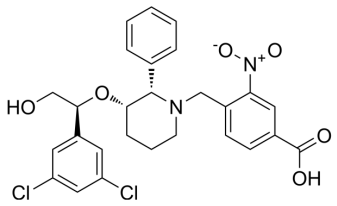
Molecular Formula: $C_{27}H_{26}Cl_2N_2O_6$

Molecular Weight: 545.41

Target: PKG

Pathway: Stem Cell/Wnt

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

PKG1α activator 3 is a PKG1α activator (EC_{50} basal/partial=13/0.52 μM). PKG1α activator 3 shows anti-proliferative effects to smooth muscle cell, and can be used in cardiovascular disease research[1].

In Vitro

PKG1α activator 3 (11.7-33.3 μM; 45 min) shows phosphorylation of VASP[1].
PKG1α activator 3 (6.2-22.8 μM; 24 h) inhibits PDGF-induced cell proliferation[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Proliferation Assay[1]

Cell Line:	Smooth muscle cells
Concentration:	6.2-22.8 μM
Incubation Time:	24 hours
Result:	Inhibited hPASMC proliferation EC_{50} value of 6 μM.

Cell Viability Assay[1]

Cell Line:	HEK 293 cells
Concentration:	11.7-33.3 μM
Incubation Time:	45 min
Result:	Showed pVASP cell EC_{50} value of 13.4 μM.

In Vivo

PKG1α activator 3 shows acceptable in vivo rat pharmacokinetic profiles[1].

	pharmacokinetic parameters			
Compound	Cl (mL/min/kg)	Vd (L/kg)	MRT (h)	PPB (%)

PKG1α activator 3	8.1	0.45	0.9	>99.9

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REFERENCES

[1]. Victor W Mak, et al. Optimization and Mechanistic Investigations of Novel Allosteric Activators of PKG1α. J Med Chem. 2022 Aug 11;65(15):10318-10340.

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