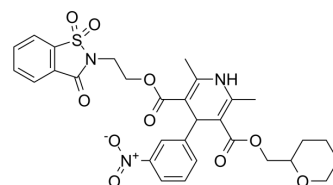


PCA50941

Cat. No.:	HY-U00034
CAS No.:	136941-85-0
Molecular Formula:	C ₃₀ H ₃₁ N ₃ O ₁₀ S
Molecular Weight:	625.65
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	PCA50941 is a 1,4-dihydropyridine derivative, used for treatment for cardiovascular disease.
In Vitro	PCA50941 (1 μ M) shifts the I-V relationship of whole-cell Ca ²⁺ currents by about 5-10 mV towards more hyperpolarizing potentials. PCA50941 increases further the K(+)-evoked peak to 655 nM. In the presence of 5 mM Ca ²⁺ , PCA50941 increases the [Ca ²⁺] _i peaks to 427 nM. PCA50941 potentiates the release of catecholamines from perfused bovine adrenal glands evoked by 30 s pulses of 17.7 mM K ⁺ in a manner dependent on the [Ca ²⁺] _o ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	PCA50941 (10-120 μ M) by intracoronary injection, causes smaller reductions of coronary blood flow (CBF) in goats. PCA50941 (10-300 μ M/min) does not modify CBF nor the other hemodynamic variables recorded by i.v. infusions in 4 goats. Intravenous infusion of PCA50941 (100 microg/min) reverses the hemodynamic variables from the shock state to control values within 20 min in 5 of 6 animals ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Montiel C, et al. Interactions between Ca²⁺, PCA50941 and Bay K 8644 in bovine chromaffin cells. *Eur J Pharmacol.* 1994 Aug 16;268(3):293-303.
- [2]. Fernández N, et al. PCA50941, a new 1,4-dihydropyridine, reverses endothelin-induced cardiogenic shock in the anesthetized goat. *Life Sci.* 1998;62(21):1933-42.

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

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