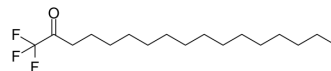


## PACOFC3

<b>Cat. No.:</b>	HY-108607		
<b>CAS No.:</b>	141022-99-3		
<b>Molecular Formula:</b>	C <sub>17</sub> H <sub>31</sub> F <sub>3</sub> O		
<b>Molecular Weight:</b>	308.42		
<b>Target:</b>	Phospholipase		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



## SOLVENT & SOLUBILITY

### In Vitro

DMSO : 33.33 mg/mL (108.07 mM; Need ultrasonic)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	3.2423 mL	16.2117 mL	32.4233 mL
	5 mM	0.6485 mL	3.2423 mL	6.4847 mL
	10 mM	0.3242 mL	1.6212 mL	3.2423 mL

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

## BIOLOGICAL ACTIVITY

### Description

PACOFC3 (Palmitryltrifluoromethylketone) is a selective phospholipase A2 inhibitor with an IC<sub>50</sub> of 3.8 μM. PACOFC3 alters Ca<sup>2+</sup> signaling in renal tubular cells<sup>[1][2]</sup>.

### IC<sub>50</sub> & Target

PLA2  
3.8 μM (IC<sub>50</sub>)

### In Vitro

At a concentration of 20 μM, PACOFC3 does not change basal cytosolic free calcium concentrations ([Ca<sup>2+</sup>]<sub>i</sub>), but at concentrations of 50-250 μM PACOFC3 induced an increase in [Ca<sup>2+</sup>]<sub>i</sub> by activating extracellular Ca<sup>2+</sup> entry which is partly suppressed by 50 μM La<sup>3+</sup><sup>[2]</sup>.

The effect of PACOFC3 is abolished by removal of extracellular Ca<sup>2+</sup>. PACOFC3 (10 μM) enhances both the peak value and the area under the curve of the [Ca<sup>2+</sup>]<sub>i</sub> increase induced by 10 μM ATP and 1 μM bradykinin by potentiating extracellular Ca<sup>2+</sup> influx without affecting internal Ca<sup>2+</sup> release<sup>[2]</sup>.

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

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## REFERENCES

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[1]. E J Ackermann, et al. Inhibition of macrophage Ca<sup>2+</sup>-independent phospholipase A<sub>2</sub> by bromoenol lactone and trifluoromethyl ketones. J Biol Chem. 1995 Jan 6;270(1):445-50.

[2]. C R Jan, et al. Dual action of palmitoyl trifluoromethyl ketone (PACOCF<sub>3</sub>) on Ca<sup>2+</sup> signaling: activation of extracellular Ca<sup>2+</sup> influx and alteration of ATP- and bradykinin-induced Ca<sup>2+</sup> responses in Madin Darby canine kidney cells. Arch Toxicol. 2000 Oct;74

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

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