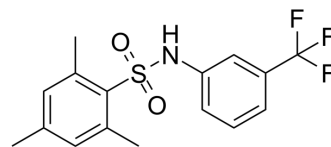


m-3M3FBS

Cat. No.:	HY-19619		
CAS No.:	200933-14-8		
Molecular Formula:	C ₁₆ H ₁₆ F ₃ NO ₂ S		
Molecular Weight:	343.36		
Target:	Phospholipase; Apoptosis		
Pathway:	Metabolic Enzyme/Protease; Apoptosis		
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 (291.24 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.9124 mL	14.5620 mL	29.1240 mL
		5 mM	0.5825 mL	2.9124 mL	5.8248 mL
10 mM		0.2912 mL	1.4562 mL	2.9124 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.5 mg/mL (7.28 mM); Suspended solution; Need ultrasonic Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.28 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	m-3M3FBS is a potent phospholipase C (PLC) activator. m-3M3FBS stimulates superoxide generation in human neutrophils, upregulates intracellular calcium concentration, and stimulates inositol phosphate generation in various cell lines. m-3M3FBS induces monocytic leukemia cell apoptosis ^{[1][2][3]} .
In Vitro	<p>m-3M3FBS (5-50 μM) stimulates the formation of inositol phosphates in U937 cells^[1].</p> <p>m-3M3FBS (50 μM; 24 hours) inhibits the growth of the leukemic cell lines U937 and THP-1, but not primary monocytes^[3].</p> <p>m-3M3FBS (50 μM; 24 hours) induces U937 cell apoptosis^[3].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay^[3]</p>

Cell Line:	U937 and THP-1 cells
Concentration:	50 μ M
Incubation Time:	24 hours
Result:	Inhibited the growth of the leukemic cell lines U937 and THP-1, but not primary monocytes.

Cell Viability Assay^[3]

Cell Line:	U937 cells
Concentration:	50 μ M
Incubation Time:	24 hours
Result:	The apoptotic rate of m-3M3FBS-treated cells was 53.9%.

REFERENCES

- [1]. Bae YS, et al. Identification of a compound that directly stimulates phospholipase C activity. *Mol Pharmacol.* 2003;63(5):1043-1050.
- [2]. Krjukova J, et al. Phospholipase C activator m-3M3FBS affects Ca²⁺ homeostasis independently of phospholipase C activation. *Br J Pharmacol.* 2004;143(1):3-7.
- [3]. Lee YN, et al. The novel phospholipase C activator, m-3M3FBS, induces monocytic leukemia cell apoptosis. *Cancer Lett.* 2005;222(2):227-235.

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

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