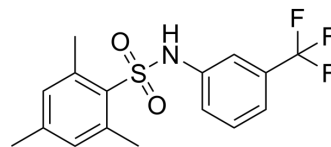


## m-3M3FBS

<b>Cat. No.:</b>	HY-19619		
<b>CAS No.:</b>	200933-14-8		
<b>Molecular Formula:</b>	C <sub>16</sub> H <sub>16</sub> F <sub>3</sub> NO <sub>2</sub> S		
<b>Molecular Weight:</b>	343.36		
<b>Target:</b>	Phospholipase; Apoptosis		
<b>Pathway:</b>	Metabolic Enzyme/Protease; Apoptosis		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 100 mg/mL (291.24 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	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.					
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: 2.5 mg/mL (7.28 mM); Suspended solution; Need ultrasonic</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (7.28 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

<b>Description</b>	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 <sup>[1][2][3]</sup> .
<b>In Vitro</b>	<p>m-3M3FBS (5-50 μM) stimulates the formation of inositol phosphates in U937 cells<sup>[1]</sup>.</p> <p>?m-3M3FBS (50 μM; 24 hours) inhibits the growth of the leukemic cell lines U937 and THP-1, but not primary monocytes<sup>[3]</sup>.</p> <p>?m-3M3FBS (50 μM; 24 hours) induces U937 cell apoptosis<sup>[3]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay<sup>[3]</sup></p>

Cell Line:	U937 and THP-1 cells
Concentration:	50 $\mu$ 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<sup>[3]</sup>

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

## CUSTOMER VALIDATION

- Nat Commun. 2024 Jan 26;15(1):759.
- Phytomedicine. 2023 May 18, 154891.
- Phytother Res. 2023 Apr 28.
- Front Mol Neurosci. 2023 Jan 6.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## 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 Ca<sup>2+</sup> 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.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA