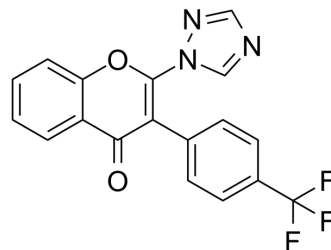


## Chromenone 1

Cat. No.:	HY-143891
CAS No.:	1639929-29-5
Molecular Formula:	C <sub>18</sub> H <sub>10</sub> F <sub>3</sub> N <sub>3</sub> O <sub>2</sub>
Molecular Weight:	357.29
Target:	TGF-β Receptor
Pathway:	TGF-beta/Smad
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (279.88 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				1 mM	2.7988 mL	13.9942 mL	27.9885 mL
				5 mM	0.5598 mL	2.7988 mL	5.5977 mL
				10 mM	0.2799 mL	1.3994 mL	2.7988 mL
Please refer to the solubility information to select the appropriate solvent.							
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (7.00 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.00 mM); Clear solution						

### BIOLOGICAL ACTIVITY

Description	Chromenone 1 is a potent osteogenic bone morphogenetic protein (BMP) potentiator. Chromenone 1 exhibits a unique mode of action as it induces a pronounced, kinase-independent, negative TGFβ feedback that enhances nuclear BMP-Smad signaling outputs <sup>[1]</sup> .
In Vitro	Chromenone 1 rescues DMH-1-induced cardiogenesis (IC <sub>50</sub> =0.2 μM) and efficiently stimulates BMP-dependent osteogenesis from C2C12 myoblasts <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

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[1]. Wesseler F, et al. Probing Embryonic Development Enables the Discovery of Unique Small-Molecule Bone Morphogenetic Protein Potentiators. J Med Chem. 2022;65(5):3978-3990.

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

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