

## **DIPQUO**

Cat. No.: HY-128591 CAS No.: 1269365-82-3

Molecular Formula:  $C_{20}H_{17}N_{3}O$ Molecular Weight: 315.37

Target: Phosphatase

Pathway: Metabolic Enzyme/Protease

Storage: Powder -20°C 3 years

4°C 2 years -80°C In solvent 6 months

-20°C 1 month

## **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 5 mg/mL (15.85 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.1709 mL	15.8544 mL	31.7088 mL
	5 mM	0.6342 mL	3.1709 mL	6.3418 mL
	10 mM	0.3171 mL	1.5854 mL	3.1709 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: ≥ 0.5 mg/mL (1.59 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 0.5 mg/mL (1.59 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 0.5 mg/mL (1.59 mM); Clear solution

## **BIOLOGICAL ACTIVITY**

Description DIPQUO is an activator of the bone marker alkaline phosphatase (ALP), with an EC  $_{50}$  of 6.27  $\mu M$  in C2C12 cells. DIPQUO promotes mouse and human osteoblast differentiation via activation of p38 MAPK- $\beta^{[1]}$ .

EC50: 6.27 μM (ALP, C2C12 cells)<sup>[1]</sup> IC<sub>50</sub> & Target

## **CUSTOMER VALIDATION**

• Calicer Mailag Res. 2021 Jan 27,15.775-765.				
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REFERENCES				
[1]. Cook B, et al. Discovery of a Small Molecule Promoting Mouse and Human Osteoblast Differentiation via Activation of p38 MAPK-B. Cell Chem Biol. 2019 Mar 29.				
Caution: Product has not been fully validated for medical applications. For research use only.				

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