# **Product** Data Sheet

# Slingshot inhibitor D3

Cat. No.: HY-124366 CAS No.: 1715076-35-9 Molecular Formula:  $C_{25}H_{19}NO_{4}S_{2}$ Molecular Weight: 461.55 Target: Others Pathway: Others

Storage: Powder -20°C

2 years

3 years

In solvent -80°C 6 months

> -20°C 1 month

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 25 mg/mL (54.17 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.1666 mL	10.8331 mL	21.6661 mL
	5 mM	0.4333 mL	2.1666 mL	4.3332 mL
	10 mM	0.2167 mL	1.0833 mL	2.1666 mL

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

## **BIOLOGICAL ACTIVITY**

Description Slingshot inhibitor D3 is a potent, selective, reversible and competitive inhibitor of Slingshot. The IC<sub>50</sub> value for Slingshot 1 is  $3~\mu\text{M}~\text{and the}~K_i~\text{value}~\text{for}~\text{Slingshot}~2~\text{is}~3.9~\mu\text{M}.~\text{Slingshot}~\text{inhibitor}~\text{D3}~\text{has}~\text{similar}~\text{inhibitory}~\text{activities}~\text{toward}~\text{both}~\text{Slingshot}~1~\text{minibitor}~\text{D3}~\text{has}~\text{similar}~\text{inhibitory}~\text{activities}~\text{toward}~\text{both}~\text{Slingshot}~1~\text{minibitor}~\text{D3}~\text{has}~\text{similar}~\text{inhibitory}~\text{activities}~\text{toward}~\text{both}~\text{Slingshot}~1~\text{minibitor}~\text{D3}~\text{has}~\text{similar}~\text{inhibitory}~\text{activities}~\text{toward}~\text{both}~\text{Slingshot}~1~\text{minibitor}~\text{D3}~\text{has}~\text{similar}~\text{inhibitory}~\text{activities}~\text{toward}~\text{both}~\text{Slingshot}~1~\text{minibitor}~\text{D3}~\text{minib$ 

and Slingshot 2<sup>[1]</sup>.

Ki: 3.9 μM (Slingshot 2)<sup>[1]</sup>. IC<sub>50</sub> & Target

IC50:  $3 \mu M (Slingshot 1)^{[1]}$ 

In Vitro Slingshot inhibitor D3 (5 µM; 45 minutes; PC12 cells;) significantly blocks NGF-induced dephosphorylation of cofilin at 15 and

30 minutes<sup>[1]</sup>.

Slingshot inhibitor D3 (5  $\mu$ M; 45 minutes; PC12 cells) significantly decreases the NGF-induced cell migration, consistent with

its inhibitory role in cofilin dephosphorylation<sup>[1]</sup>.

Slingshot inhibitor D3 (HEK293 cells) specifically blocks angiotensin II-induced cofilin dephosphorylation. Slingshot inhibitor

D3 prevents cofilin dephosphroylation through inhibition of Slingshot<sup>[1]</sup>.

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

Western Blot Analysis<sup>[1]</sup>

Cell Line:	PC12 cells	
Concentration:	5 μΜ	
Incubation Time:	45 minutes	
Result:	Significantly blocked NGF-induced dephosphorylation of cofilin at 15 and 30 minutes.	

## **REFERENCES**

[1]. Li KS, et al. Identification of para-Substituted Benzoic Acid Derivatives as Potent Inhibitors of the Protein Phosphatase Slingshot. ChemMedChem. 2015;10(12):1980-1987.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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