# **Product** Data Sheet



## Phox-I2

Cat. No.: HY-119576 CAS No.: 353495-22-4 Molecular Formula:  $C_{18}H_{15}N_3O_4$ Molecular Weight: 337.33

Target: NADPH Oxidase; Reactive Oxygen Species

Pathway: Metabolic Enzyme/Protease; Immunology/Inflammation; NF-κΒ

Storage: Powder -20°C 3 years

In solvent

4°C 2 years -80°C 6 months

-20°C 1 month

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 250 mg/mL (741.11 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.9645 mL	14.8223 mL	29.6446 mL
	5 mM	0.5929 mL	2.9645 mL	5.9289 mL
	10 mM	0.2964 mL	1.4822 mL	2.9645 mL

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

### **BIOLOGICAL ACTIVITY**

Description	Phox-I2 is a selective inhibitor of p67 $^{\rm phox}$ -Rac1 interaction, binds to p67 $^{\rm phox}$ with high affinity with a K <sub>d</sub> of ~150 nM. Phox-I2 is a NADPH oxidase 2 (NOX2) inhibitor and inhibits reactive oxygen species (ROS) production <sup>[1]</sup> .
IC <sub>50</sub> & Target	Kd: 150 nM (p67 <sup>phox</sup> ) <sup>[1]</sup>
In Vitro	Phox-I2 is effective in inhibiting NOX2-mediated superoxide production dose-dependently in dHL-60 cells and primary human neutrophils without detectable toxicity <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### **REFERENCES**

[1]. Emily E Bosco, et al. Rational design of small molecule inhibitors targeting the Rac GTPase-p67(phox) signaling axis in inflammation. Chem Biol. 2012 Feb 24;19(2):228-42.

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

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