## **Product** Data Sheet

# (R)-Benpyrine

Cat. No.: HY-133807B CAS No.: 2637243-08-2 Molecular Formula:  $\mathsf{C}_{16}\mathsf{H}_{16}\mathsf{N}_{6}\mathsf{O}$ Molecular Weight: 308.34 Others Target: Pathway: Others

Storage: Powder -20°C 3 years

2 years

-80°C In solvent 6 months

> -20°C 1 month

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 6.67 mg/mL (21.63 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.2432 mL	16.2159 mL	32.4317 mL
	5 mM	0.6486 mL	3.2432 mL	6.4863 mL
	10 mM	0.3243 mL	1.6216 mL	3.2432 mL

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

### **BIOLOGICAL ACTIVITY**

Description

(R)-Benpyrine is the isomer of Benpyrine (HY-133807), and can be used as an experimental control. Benpyrine is a highly specific and orally active TNF- $\alpha$  inhibitor with a  $K_D$  value of 82.1  $\mu$ M. Benpyrine tightly binds to TNF- $\alpha$  and blocks its interaction with TNFR1, with an IC<sub>50</sub> value of 0.109 μM. Benpyrine has the potential for TNF-α mediated inflammatory and autoimmune disease research<sup>[1]</sup>.

#### **REFERENCES**

[1]. Weiguang Sun, et al. Discovery of an Orally Active Small Molecule TNF-α Inhibitor. J Med Chem. 2020 Jul 15.

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

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