## **Product** Data Sheet

## TLR8 agonist 2

Molecular Weight:

Cat. No.: HY-141454 CAS No.: 2412937-64-3 Molecular Formula:  $C_{16}H_{22}N_8$ 

Target: Toll-like Receptor (TLR)

Pathway: Immunology/Inflammation

326.4

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	TLR8 agonist 2 is a potent and selective TLR8 agonist with an EC <sub>50</sub> of 3 nM for human TLR8. TLR8 agonist 2 shows less active against human TLR7 (EC <sub>50</sub> of 33.33 $\mu$ M) <sup>[1]</sup> .		
IC <sub>50</sub> & Target	TLR8 TLR7 3 nM (EC50) 33.33 μM (EC50)		
In Vitro	TLR8 agonist 2 (Example 1) increases the levels of TNF- $\alpha$ , IL-12p40, IFN- $\gamma$ , and IFN- $\alpha$ with EC <sub>50</sub> values 105 nM, 26 nM, 29 nM, and 2800 nM, respectively, in human peripheral blood mononuclear cells (hPBMC) <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.		
In Vivo	The pharmacokinetic related parameters of TLR8 agonist 2 (Example 1) in mice administered with the intravenous administration of 1 mg/kg and the oral administration of 5 mg/kg are detected. The $T_{1/2}$ of TLR8 agonist 2 are 0.25 h (1 mg/kg i.v.) and 0.5 h (5 mg/kg p.o.), the AUClast are 450 ng/mL*hr (i.v.) and 624 ng/mL*hr (p.o.). And for oral administration, the bioavailability (%F) is 27.7% <sup>[1]</sup> MCE has not independently confirmed the accuracy of these methods. They are for reference only.		

## **REFERENCES**

[1]. Zhe Cai, et al. Tlr8 agonist. WO2020057604A1.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA