

TLR7-agonist-1

Catalog No: tcsc0023485



Available Sizes

Size: 1mg

Size: 5mg

Size: 10mg

Size: 25mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

1642857-69-9

Formula:

$C_{17}H_{16}N_6O_2$

Pathway:

Immunology/Inflammation

Target:

Toll-like Receptor (TLR)

Purity / Grade:

>98%

Solubility:

DMSO : 160 mg/mL (475.69 mM; Need ultrasonic and warming)

Observed Molecular Weight:

336.35

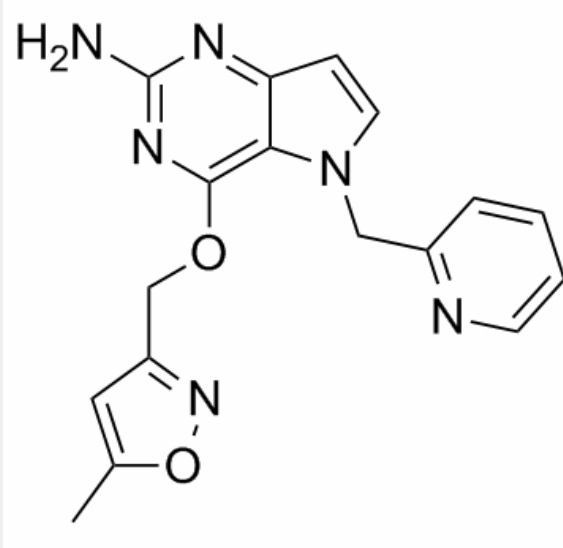
Product Description

TLR7-agonist-1 is a potent and selective **Toll-like Receptor 7 (TLR7)** agonist with a **LEC** of 0.4 μM .

IC₅₀ & Target: LEC: 0.4 μM (TLR7)^[1]

In Vitro: TLR7-agonist-1 is a potent and selective Toll-like Receptor 7 (TLR7) agonist with a lowest effective concentration (LEC) of 0.4 μM in HEK293 cell. TLR7-agonist-1 is found to be selective for TLR7 over TLR8 with LEC of >100 μM for human TLR8. TLR7-agonist-1 demonstrates low inhibition across five CYP450 isozymes (IC₅₀ >10 μM) and is also not a time dependent inhibitor of CYP450 3A4. TLR7-agonist-1 has limited inhibition of the hERG potassium ion channel ³H-dofetilide binding *in vitro* (IC₅₀ >50 μM)^[1].

In Vivo: TLR7-agonist-1 is found to be rapidly cleared in conjunction with our target profile. Both C_{max} and AUC increase less than dose proportionally between 0.3 and 3 mg/kg and more than dose-proportionally between 3 and 10 mg/kg. TLR7-agonist-1 can induce an antiviral interferon stimulated gene (ISG) response without inducing an IFN α response at a low dose. TLR7-agonist-1 also induces a 2.7 log decrease in serum HBV viral load from 0.3 mg/kg, and a maximum 3.1 log decrease is observed for doses between 1 and 5 mg/kg^[1].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!