

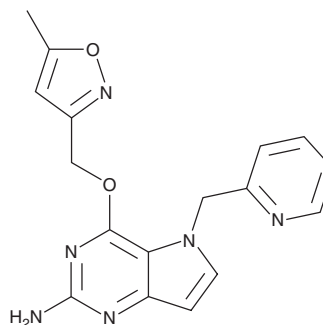
PRODUCT INFORMATION



TLR7 Agonist 2

Item No. 28450

CAS Registry No.: 1642857-69-9
Formal Name: 4-[(5-methyl-3-isoxazolyl)methoxy]-5-(2-pyridinylmethyl)-5H-pyrrolo[3,2-d]pyrimidin-2-amine
Synonym: Toll-Like Receptor 7 Agonist 2
MF: C₁₇H₁₆N₆O₂
FW: 336.4
Purity: ≥98%
UV/Vis.: λ_{max}: 232, 269, 294 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

TLR7 agonist 2 is supplied as a crystalline solid. A stock solution may be made by dissolving the TLR7 agonist 2 in the solvent of choice, which should be purged with an inert gas. TLR7 agonist 2 is soluble in the organic solvent DMSO at a concentration of approximately 160 mg/ml.

Description

TLR agonist 2 is a toll-like receptor 7 (TLR7) agonist with a lowest effective concentration (LEC) value of 0.4 μM in a cell-based reporter assay.¹ It is selective for TLR7 over TLR8 (LEC = >100 μM). TLR7 agonist 2 (0.3-10 mg/kg) increases IFN-α levels and the IFN-stimulated gene (ISG) response, increasing the expression of *Oas1b*, *Isg15*, and *Mx1*, in mouse liver and plasma. It increases plasma levels of IFN-α, CCL2, IL-6, IL-1Ra, G-CSF, and IL-10 in cynomolgus monkeys when administered at a dose of 10 mg/kg. TLR agonist 2 (0.3-5 mg/kg) reduces serum and liver viral load in the hydrodynamic injection (HDI) hepatitis B virus (HBV) mouse model.

Reference

1. McGowan, D.C., Herschke, F., Pauwels, F., *et al.* Identification and optimization of pyrrolo[3,2-d]pyrimidine toll-like receptor 7 (TLR7) selective agonists for the treatment of Hepatitis B. *J. Med. Chem.* **60**(14), 6137-6151 (2017).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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