# PRODUCT INFORMATION



# **IRAK4** Inhibitor 1

Item No. 37548

CAS Registry No.: 1820787-94-7

4-[[trans-4-(4-morpholinyl)cyclohexyl]amino]-Formal Name:

6-quinazolinecarbonitrile

Synonyms: IL-1 Receptor-associated Kinase 4 Inhibitor 1,

Interleukin-1 Receptor-associated Kinase 4

Inhibitor 1, IRAK4-IN-1

MF:  $C_{19}H_{23}N_5O$ FW: 337.4 **Purity:** ≥98% UV/Vis.:  $\lambda_{max}$ : 217 nm A solid Supplied as: -20°C Storage: ≥4 years Stability:

N

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

### **Laboratory Procedures**

IRAK4 Inhibitor 1 (IRAK4-IN-1) is supplied as a solid. A stock solution may be made by dissolving the IRAK4-IN-1 in the solvent of choice, which should be purged with an inert gas. IRAK4-IN-1 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of IRAK4-IN-1 in these solvents is approximately 10 and 0.5 mg/ml, respectively.

#### Description

IRAK4-IN-1 is an inhibitor of IL-1 receptor-associated kinase 4 (IRAK4; IC<sub>50</sub> = 7 nM).<sup>1</sup> It reduces TNF- $\alpha$ level increases induced by the toll-like receptor 7 (TLR7) agonist resiquimod (R-848; Item No. 14806) in isolated human peripheral blood mononuclear cells (PBMCs; EC<sub>50</sub> = 300 nM).

#### Reference

1. Smith, G.F., Altman, M.D., Andresen, B., et al. Identification of quinazoline based inhibitors of IRAK4 for the treatment of inflammation. Bioorg. Med. Chem. Lett. 27(12), 2721-2726 (2017).

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

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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