

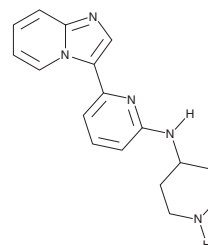
# PRODUCT INFORMATION



## IRAK Inhibitor 1

Item No. 36637

**CAS Registry No.:** 1042224-63-4  
**Formal Name:** 6-imidazo[1,2-a]pyridin-3-yl-N-4-piperidinyl-2-pyridinamine  
**Synonym:** IL-1 Receptor-associated Kinase 4 Inhibitor 1, Interleukin-1 Receptor-associated Kinase 4 Inhibitor 1, IRAK-IN-1  
**MF:** C<sub>17</sub>H<sub>19</sub>N<sub>5</sub>  
**FW:** 293.4  
**Purity:** ≥98%  
**Supplied as:** A 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

IRAK inhibitor 1 is supplied as a solid. A stock solution may be made by dissolving the IRAK inhibitor 1 in the solvent of choice, which should be purged with an inert gas. IRAK inhibitor 1 is soluble in DMSO (sonicated).

### Description

IRAK inhibitor 1 is an inhibitor of IL-1 receptor-associated kinase 4 (IRAK4; IC<sub>50</sub> = 35 nM).<sup>1</sup> It is selective for IRAK4 over JNK1 and JNK2 at 10 μM. IRAK inhibitor 1 (1 μM) prevents increases in TNF-α and IL-12p40 levels in THP-1 cells infected with *M. bovis*.<sup>2</sup>

### References

1. Buckley, G.M., Ceska, T.A., Fraser, J.L., *et al.* IRAK-4 inhibitors. Part II: A structure-based assessment of imidazo[1,2-a]pyridine binding. *Bioorg. Med. Chem. Lett.* **8**(11), 3291-3295 (2008).
2. Marinho, F.V., Fahel, J.S., Scanga, C.A., *et al.* Lack of IL-1 receptor-associated kinase-4 leads to defective Th1 cell responses and renders mice susceptible to mycobacterial infection. *J. Immunol.* **197**(5), 1852-1863 (2016).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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