

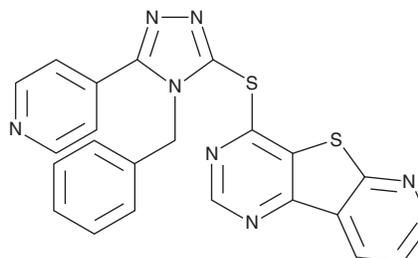
# PRODUCT INFORMATION



## TH1020

Item No. 33553

**CAS Registry No.:** 1841460-82-9  
**Formal Name:** 4-[[4-(phenylmethyl)-5-(4-pyridinyl)-4H-1,2,4-triazol-3-yl]thio]-pyrido[3',2':4,5]thieno[3,2-d]pyrimidine  
**MF:** C<sub>23</sub>H<sub>15</sub>N<sub>7</sub>S<sub>2</sub>  
**FW:** 453.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 236, 267, 293 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

TH1020 is supplied as a crystalline solid. A stock solution may be made by dissolving the TH1020 in the solvent of choice, which should be purged with an inert gas. TH1020 is soluble in the organic solvent chloroform at a concentration of approximately 1 mg/ml.

### Description

TH1020 is an inhibitor of the protein-protein interaction between toll-like receptor 5 (TLR5) and flagellin.<sup>1</sup> It binds to the TLR5 heterodimer interface to disrupt TLR5-flagellin tetramer formation and inhibits flagellin-induced TLR5 signaling in TLR5-overexpressing HEK cells (IC<sub>50</sub> = 0.85 μM). TH1020 (0.37 μM) inhibits flagellin-induced, TLR5-mediated secretion of TNF-α in primary human peripheral blood mononuclear cells (PBMCs).

### Reference

1. Yan, L., Liang, J., Yao, C., *et al.* Pyrimidine triazole thioether derivatives as toll-like receptor 5 (TLR5)/flagellin complex inhibitors. *ChemMedChem* **11**(8), 822-826 (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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