

<b>Product Name</b>	: TH1020
<b>Synonyms</b>	: —
<b>Cat No.</b>	: M22635
<b>CAS Number</b>	: 1841460-82-9
<b>Molecular Formula</b>	: C <sub>23</sub> H <sub>15</sub> N <sub>7</sub> S <sub>2</sub>
<b>Formula Weight</b>	: 453.54
<b>Chemical Name</b>	: —
<b>Description</b>	<p>TH1020 is a novel Inhibitor of Toll-Like Receptor 5 (TLR5)/Flagellin Complex with promising activity (IC<sub>50</sub> = 0.85 ± 0.12 μm) and specificity. TH1020 was repress the expression of downstream TNF-α signaling pathways mediated by the TLR5/flagellin complex formation. Based on molecular docking simulation, TH1020 is suggested to compete with flagellin and disrupt its association with TLR5. TH1020 provides a much-needed molecular probe for studying this important protein-protein interaction and a lead compound for identifying novel therapeutics targeting TLR5.</p>
<b>Pathway</b>	: GPCR/G Protein
<b>Target</b>	: Antibacterial
<b>Receptor</b>	: TLR5; Bacterial
<b>Solubility</b>	: DMSO: 2 mg/mL (4.41 mM); ultrasonic and warming and adjust pH to 2 with 1M HCl and heat to 80°C
<b>SMILES</b>	: <chem>C(c1ccccc1)n1c(Sc2ncnc3c4ccccc4sc23)nnc1-c1ccncc1</chem>
<b>Storage</b>	: (-20°C)
<b>Stability</b>	: ≥ 2 years
<b>Reference</b>	:

1. Lei Yan, et al. Pyrimidine Triazole Thioether Derivatives as Toll-Like Receptor 5 (TLR5)/Flagellin Complex Inhibitors. ChemMedChem. 2016 Apr 19; 11(8):822-6.