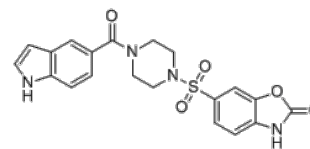


Product Name : TH1760
Cat. No. : PC-38226
CAS No. : 2567914-01-4
Molecular Formula : C₂₀H₁₈N₄O₅S
Molecular Weight : 426.447
Target : DNA Repair Protein
Solubility : 10 mM in DMSO



Biological Activity

TH1760 (TH 1760) is a first-in-class, potent, selective, cell-active **NUDT15** inhibitor with IC₅₀ of 25 nM.

TH1760 displays no significant interaction and/or inhibition against other human NUDIX proteins (MTH1, NUDT2, NUDT5, NUDT9, NUDT12, NUDT14, NUDT18 and NUDT22) and nucleotide pyrophosphatases (dCTPase, dUTPase and ITPase).

TH1760 sensitized cells to thiopurine in a NUDT15-dependent manner, through promoting intracellular accumulation and incorporation of 6-thio-dGTP.

At the tested concentration of 10 μM, TH1760 effectively engaged intracellular NUDT15 and further strongly potentiated its substrate thiopurines metabolites, without demonstrating apparent off-target toxicity.

TH1760 is a valuable tool to decipher the potential of NUDT15 inhibition in overcoming emerging resistance during thiopurine therapy.

References

Zhang SM, et al. *Nat Chem Biol*. 2020 Oct;16(10):1120-1128.

Rehling D, et al. *J Biol Chem*. 2021 Jan-Jun;296:100568.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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