

TH588, MTH1/NUDT1 inhibitor

Catalog	Unit
TBI4602-5MG	5 mg
TBI4602-25MG	25 mg

Product Details

Formal Name: N4-Cyclopropyl-6-(2,3-dichlorophenyl)pyrimidine-2,4-diamine hydrochloride

Molecular Formula: C₁₃H₁₂Cl₂N₄·HCl

Formula Weight: 331.63

CAS Number: 1609960-31-7 (free base)

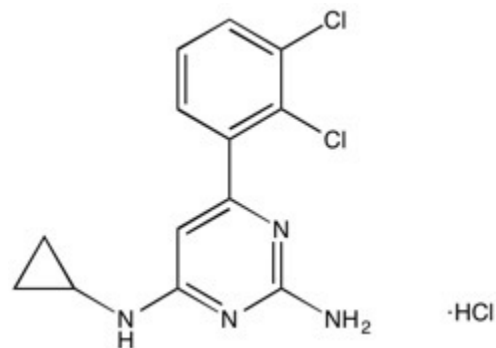
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 5 mg/ml).

Storage: -20°C

Stability: ≥ 1 year.



Applications

MTH1/NUDT1 inhibitor

Functions

TH588 is a first-in-class nudix hydrolase family inhibitor. MTH1/NUDT1 is a family member that “sanitizes” oxidized deoxynucleotide triphosphates (dNTP) preventing their incorporation into DNA and thus avoiding DNA damage and cell death. TH588 inhibits MTH1/NUDT1 (IC₅₀ = 5 nM) leading to cell death in several cancer cell lines while not affecting normal cells. Active in vitro and in vivo. Recent evidence has raised doubts about the cancer-killing ability of MTH1 inhibition.

Application Procedures

First dissolved in DMSO (up to 5 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

For research use only.