

IWP-4, Wnt inhibitor

Catalog	Unit
TBI3370-5MG	5 mg
TBI3370-25MG	25 mg

Product Details

Formal Name: N-(6-Methyl-2-benzothiazolyl)-2-[(3,4,6,7-tetrahydro-3-(2-methoxyphenyl)-4-oxothieno[3,2-d]pyrimidin-2-yl)thio]-acetamide

Molecular Formula: C₂₃H₂₀N₄O₃S₃

Formula Weight: 496.60

CAS Number: 686772-17-8

Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 0.5 mg/ml, with warming)

Storage: -20°C

Stability: ≥ 2 years.

Applications

Wnt inhibitor

Functions

Potent Wnt pathway inhibitor (IC₅₀ = 25 nM in cells that exhibit constitutive Wnt pathway activation) that targets Porcupine (a membrane-bound O-acyltransferase), preventing critical Wnt ligand palmitoylation. Also acts as an ATP-competitive inhibitor of mutant (M82F) Casein Kinase 1δ (IC₅₀ = 142 nM). Inhibits growth and migration of cancer cell lines such as HT29, Panc1, and MDA-MB-2312,. Inhibits osteogenic differentiation. When used with CHIR-99021 (#MC-1279), induces cardiac differentiation by blocking expression of pluripotency markers and upregulating cardiac transcription factors.

Application Procedures

First dissolved in DMSO (up to 0.5 mg/ml, with warming), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

For research use only.