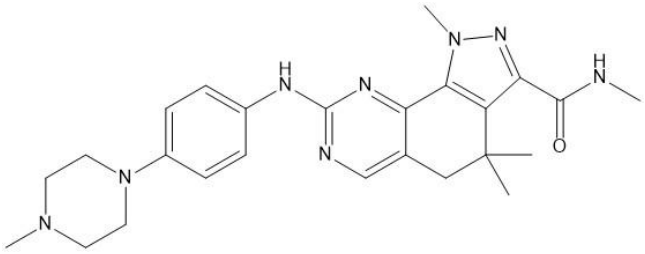
Tribioscience

Milciclib, CDK inhibitor

Catalog	Unit
TBI4867-5MG	5 mg
TBI4867-25MG	25 mg

Product Details

Formal Name: N,1,4,4-Tetramethyl-8-[4-(4-methylpiperazin-1-yl)anilino]-5H-pyrazolo[4,3-h]quinazoline-3-carboxamide
Alternate Names: PHA-848125
Molecular Formula: $C_{25}H_{32}N_8O$
Formula Weight: 460.6
CAS Number: 802539-81-7
Purity: >98%
Formulation: Powder
Solubility: Soluble in DMSO (20 mg/ml with warming).
Storage: -20°C
Stability: ≥ 2 years



Applications

CDK inhibitor

Functions

Potent inhibitor of cyclin-dependent kinases (IC_{50}s: CDK1 = 398 nM, CDK2 = 45 nM, CDK4 = 160 nM, CDK5 = 265 nM, CDK7 = 150 nM). It is also a potent inhibitor of TRKA and C (IC_{50} = A, 53 nM; C, 134 nM). Displayed antitumor activity across multiple cancer cell lines including lymphoma, colon, kidney, ovarian, NSCLC, neuroblastoma, and osteosarcoma. It was also active in various human cancer xenograft and other models. It showed antitumor activity in malignant glioma cells and acted synergistically with temozolomide. Displayed efficacy in combination with gemcitabine in patients with refractory solid tumors. It blocked glucose consumption in H460 and H1975 cells by decreasing SLC2A1 mRNA and protein levels and inhibiting glucose transport via CDK7 inhibition.

Application Procedures

First dissolved in Soluble in DMSO (20 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.