PRODUCT INFORMATION

PHA-848125
Item No. 21474

CAS Registry No.: 802539-81-7
Formal Name: 4,5-dihydro-N,1,4,4-tetramethyl-8-[[4-(4-methyl-1-piperazinyl)phenyl]amino]-1H-pyrazolo[4,3-h]quinazoline-3-carboxamide
Synonym: Milciclib
MF: C_{25}H_{32}N_{8}O
FW: 460.6
Purity: ≥98%
UV/Vis.: \( \lambda_{\text{max}} \): 295 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

PHA-848125 is supplied as a crystalline solid. A stock solution may be made by dissolving the PHA-848125 in the solvent of choice, which should be purged with an inert gas. PHA-848125 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of PHA-848125 in these solvents is approximately 10 and 5 mg/ml, respectively.

PHA-848125 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PHA-848125 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. PHA-848125 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

PHA-848125 is an ATP-competitive inhibitor of cyclin-dependent kinases (Cdks) that potently inhibits Cdk2/cyclin A (IC\(_{50}\) = 45 nM).\(^{1}\) It is at least 3-fold less potent at Cdks 1, 3, 4, 5, and 7.\(^{1}\) PHA-848125 is orally available and displays efficacy in suppressing the growth of cancer cells or tumor xenografts in animals.\(^{1-3}\)

References