

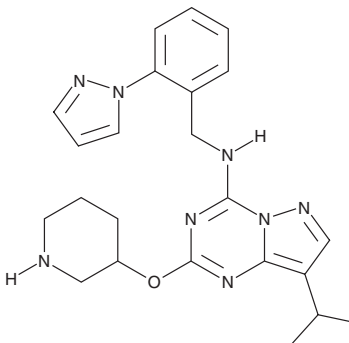
PRODUCT INFORMATION



LDC-4297

Item No. 23398

CAS Registry No.: 1453834-21-3
Formal Name: 8-(1-methylethyl)-2-(3-piperidinyloxy)-N-[[2-(1H-pyrazol-1-yl)phenyl]methyl]-pyrazolo[1,5-a]-1,3,5-triazin-4-amine
MF: C₂₃H₂₈N₈O
FW: 432.5
Purity: ≥98%
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

LDC-4297 is supplied as a crystalline solid. A stock solution may be made by dissolving the LDC-4297 in the solvent of choice. LDC-4297 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of LDC-4297 in these solvents is approximately 20 mg/ml.

Description

LDC-4297 is an inhibitor of cyclin-dependent kinase 7 (CDK7; IC₅₀ = <5 nM).¹ It is selective for CDK7 over CDK4, CDK6, and CDK9 (IC₅₀s = >10, >10, and 1.71 μM, respectively), however, it also inhibits CDK2 and CDK1 (IC₅₀s = 6.4 and 53.7 nM, respectively). LDC-4297 (10-100 nM) induces apoptosis in A549, HeLa, and HCT116 cancer cells in a concentration-dependent manner. It inhibits human cytomegalovirus (HCMV) replication in human fibroblasts (EC₅₀ = 24.5 nM).² LDC-4297 also reduces replication of *Herpesviridae*, *Adenoviridae*, *Poxviridae*, *Retroviridae*, and *Orthomyxoviridae* family viruses (EC₅₀s = 0.02-1.13 μM).

References

1. Kelso, T.W.R., Baumgart, K., Eickhoff, J., *et al.* Cyclin-dependent kinase 7 controls mRNA synthesis by affecting stability of preinitiation complexes, leading to altered gene expression, cell cycle progression, and survival of tumor cells. *Mol. Cell. Biol.* **34**(19), 3675-3688 (2014).
2. Hutterer, C., Eickhoff, J., Milbradt, J., *et al.* A novel CDK7 inhibitor of the pyrazolotriazine class exerts broad-spectrum antiviral activity at nanomolar concentrations. *Antimicrob. Agents Chemother.* **59**(4), 2062-2071 (2015).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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