

PRODUCT INFORMATION

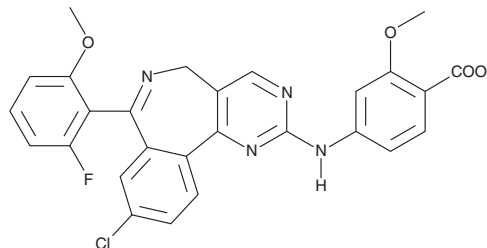


MLN8237

Item No. 13602

CAS Registry No.: 1028486-01-2
Formal Name: 4-[[9-chloro-7-(2-fluoro-6-methoxyphenyl)-5H-pyrimido[5,4-d][2]benzazepin-2-yl]amino]-2-methoxy-benzoic acid

Synonym: Alisertib
MF: C₂₇H₂₀ClFN₄O₄
FW: 518.9
Purity: ≥98%
UV/Vis.: λ_{max}: 225, 314 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

MLN8237 is supplied as a crystalline solid. A stock solution may be made by dissolving the MLN8237 in the solvent of choice, which should be purged with an inert gas. MLN8237 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of MLN8237 in these solvents is approximately 1 and 2 mg/ml, respectively.

MLN8237 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, MLN8237 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. MLN8237 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

MLN8237 is an inhibitor of Aurora A kinase (IC₅₀ = 1 nM).¹ It is selective for Aurora A over Aurora B kinase (IC₅₀ = 396.5 nM).² MLN8237 (50 nM) induces cell cycle arrest at the G₂/M phase and chromosomal misalignment in HCT116 colon cancer cells. It inhibits tumor growth in a Calu-6 non-small cell lung cancer (NSCLC) mouse xenograft model when administered at a dose of 20 mg/kg.¹

References

1. Sells, T.B., Chau, R., Ecsedy, J.A., *et al.* MLN8054 and alisertib (MLN8237): Discovery of selective oral Aurora A inhibitors. *ACS Med. Chem. Lett.* **6**(6), 630-634 (2015).
2. Manfredi, M.G., Ecsedy, J.A., Chakravarty, A., *et al.* Characterization of alisertib (MLN8237), an investigational small-molecule inhibitor of Aurora A kinase using novel *in vivo* pharmacodynamic assays. *Clin. Cancer Res.* **17**(24), 7614-7624 (2011).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM