# **PRODUCT** INFORMATION



## MLN8054

Item No. 27340

CAS Registry No.: Formal Name:	869363-13-3 4-[[9-chloro-7-(2,6- difluorophenyl)-5H- pyrimido[5,4-d][2]benzazepin-2- yl]amino]-benzoic acid	H N OH
MF:	$C_{25}H_{15}CIF_{2}N_{4}O_{2}$	
FW:	476.9	
Purity:	≥98%	
UV/Vis.:	λ <sub>max</sub> : 226, 310 nm	FN′
Supplied as:	A crystalline solid	$\rightarrow = \langle$
Storage:	-20°C	K / F
Stability:	≥4 years	
Information represents the product specifications. Patch specific applytical results are provided on each certificate of		

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

#### Laboratory Procedures

MLN8054 is supplied as a crystalline solid. A stock solution may be made by dissolving the MLN8054 in the solvent of choice, which should be purged with an inert gas. MLN8054 is soluble in DMSO and slightly soluble in ethanol.

#### Description

MLN8054 is an ATP-competitive inhibitor of Aurora A kinase (IC<sub>50</sub> = 4 nM).<sup>1</sup> It is selective for Aurora A over Aurora B, PKC, CaMKII, Cdk2E, CK2, LCK, PKA, Chk1, Chk2, Cdk1, and Plk1 (IC<sub>50</sub>s = 0.172-100  $\mu$ M). MLN8054 induces cell cycle arrest at the G<sub>2</sub>/M phase and the formation of abnormal mitotic spindles in HCT116 colorectal and PC3 prostate cancer cells. It inhibits the growth of HCT116, SW480, DLD-1, MCF-7, MDA-MB-231, Calu-6, H460, SKOV3, and PC3 cancer cells (IC<sub>50</sub>s = 0.11-1.43 μM). MLN8054 (30 mg/kg) reduces tumor volume in HCT116 and PC3 mouse xenograft models.

#### Reference

1. Manfredi, M.G., Ecsedy, J.A., Meetze, K.A., et al. Antitumor activity of MLN8054, an orally active small-molecule inhibitor of Aurora A kinase. Proc. Natl. Acad. Sci. U.S.A. 104(10), 4106-4111 (2007).

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.

#### WARRANTY AND LIMITATION OF REMEDY

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