## PRODUCT INFORMATION



**ZCL 278** 

Item No. 14849

CAS Registry No.: 587841-73-4

Formal Name: 2-(4-bromo-2-chlorophenoxy)-N-

> [[[4-[[(4,6-dimethyl-2-pyrimidinyl) amino]sulfonyl]phenyl]amino] thioxomethyl]-acetamide

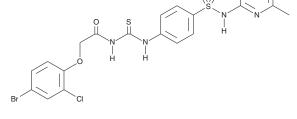
 $C_{21}H_{19}BrCIN_5O_4S_2$ MF:

FW: 584.9 **Purity:** ≥95%

 $\lambda_{\text{max}}$ : 257, 313 nm A crystalline solid UV/Vis.: Supplied as:

-20°C Storage: Stability: ≥4 years

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



## **Laboratory Procedures**

ZCL 278 is supplied as a crystalline solid. A stock solution may be made by dissolving the ZCL 278 in the solvent of choice, which should be purged with an inert gas. ZCL 278 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of ZCL 278 in these solvents is approximately 20 and 25 mg/ml, respectively.

## Description

ZCL 278 is a cell-permeable inhibitor of Cdc42, a Rho family GTPase. 1 It binds into the surface groove on Cdc42 ( $K_d$  = 6.4-11.4  $\mu$ M), blocking interaction with intersectin (ITSN), a guanine nucleotide exchange factor (GEF). It inhibits Cdc42-mediated microspike formation and neuronal branching in 3T3 fibroblast and neonatal cortical neurons, respectively. ZCL 278 also exhibits potent antiviral activity by inhibiting cellular entry of Junin virus (JUNV) and other enveloped viruses into cells and inhibiting viral replication in mice.<sup>2</sup>

## References

- 1. Friesland, A., Zhao, Y., Chen, Y.-H., et al. Small molecule targeting Cdc42-intersectin interaction disrupts Golgi organization and suppresses cell motility. Proc. Natl. Acad. Sci. USA 110(4), 1261-1266 (2016).
- Chou, Y.-y., Cuevas, C., Carocci, M., et al. Identification and characterization of a novel broad-spectrum virus entry inhibitor. J. Virol. 90(9), 4494-4510 (2016).

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

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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