PRODUCT INFORMATION



BAY-850

Item No. 23422

CAS Registry No.: 2099142-76-2

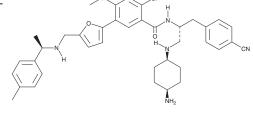
Formal Name: N-[(1R)-2-[(cis-4-aminocyclohexyl)

> amino]-1-[(4-cyanophenyl)methyl]ethyl]-2-chloro-4-methoxy-5-[5-[[(1R)-1-(4methylphenyl)ethyl]amino]methyl]-2-

furanyl]-benzamide

MF: $C_{38}H_{44}CIN_5O_3$

FW: 654.2 **Purity:** ≥98% Supplied as: A solid -20°C Storage: Stability: ≥4 years



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

Laboratory Procedures

BAY-850 is supplied as a solid. A stock solution may be made by dissolving the BAY-850 in the solvent of choice, which should be purged with an inert gas. BAY-850 is slightly soluble in acetonitrile (0.1-1 mg/ml) and sparingly soluble in DMSO (1-10 mg/ml).

Description

BAY-850 is an inhibitor of the ATPase family AAA domain-containing protein 2 (ATAD2; IC₅₀ = 22 nM in a time-resolved FRET assay using a tetra-acetylated histone H4 peptide).¹ It is selective for ATAD2 over a panel of 32 bromodomain family proteins, including ATAD2B, a panel of 354 kinases, and a panel of 25 G protein-coupled receptors (GPCRs) at 1 μM. BAY-850 induces dimerization of ATAD2 in a concentration-dependent manner in a cell-free assay and inhibits the ATAD2-chromatin interaction in MCF-7 breast cancer cells in a fluorescence recovery after photobleaching (FRAP) assay. It induces apoptosis and cell cycle arrest in, and inhibits proliferation, invasion, and migration of, PA-1 and SKOV3 ovarian cancer cells when used at a concentration of 5 μM.² BAY-850 (20 mg/kg) reduces tumor volume and the percentage of lung metastases in a SKOV3 mouse xenograft model. See the Structural Genomics Consortium (SGC) website for more information.

References

- 1. Fernández-Montalván, A.E., Berger, M., Kuropka, B., et al. Isoform-selective ATAD2 chemical probe with novel chemical structure and unusual mode of action. ACS Chem. Biol. 12(11), 2730-2736 (2017).
- 2. Guruvaiah, P., Chava, S., Sun, C.W., et al. ATAD2 is a driver and a therapeutic target in ovarian cancer that functions by upregulating CENPE. Cell Death Dis. 14(7), 456 (2023).

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.

WARRANTY AND LIMITATION OF REMEDY

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