PRODUCT INFORMATION



IMR-1A

Item No. 37432

CAS Registry No.: 331862-41-0

Formal Name: 2-[2-methoxy-4-[(4-oxo-2-thioxo-5-

thiazolidinylidene)methyl],phenoxy]-

MF: $C_{13}H_{11}NO_{5}S_{2}$

325.4 FW: ≥95% **Purity:**

UV/Vis.: λ_{max} : 393 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

IMR-1A is supplied as a crystalline solid. A stock solution may be made by dissolving the IMR-1A in the solvent of choice, which should be purged with an inert gas. IMR-1A is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of IMR-1A in these solvents is approximately 25 mg/ml.

Description

IMR-1A is an inhibitor of Notch ternary complex formation (IC $_{50}$ = 0.5 μ M) and an active metabolite of the mastermind-like 1 (MAM-1) chromatin recruitment inhibitor IMR-1 (Item No. 27920). It binds to the intracellular domain of Notch (K_d = 2.9 μ M) and disrupts the protein-protein interactions between Notch and MAM-1 and CFB1, suppressor of Hairless, Lag-1 (CSL) transcription factor. IMR-1A increases multiciliation in primary choroid plexus cancer cells when used at a concentration of 25 μ M.²

References

- 1. Astudillo, L., Da Silva, T.G., Wang, Z., et al. The small molecule IMR-1 inhibits the Notch transcriptional activation complex to suppress tumorigenesis. Cancer Res. 76(12), 3593-3603 (2016).
- Li, Q., Han, Z., Singh, N., et al. Disruption of GMNC-MCIDAS multiciliogenesis program is critical in choroid plexus carcinoma development. Cell Death Differ. 29(8), 1596-1610 (2022).

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

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information Buyer agrees to purchase the material can be found on our website.

Copyright Cayman Chemical Company, 05/31/2023

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