

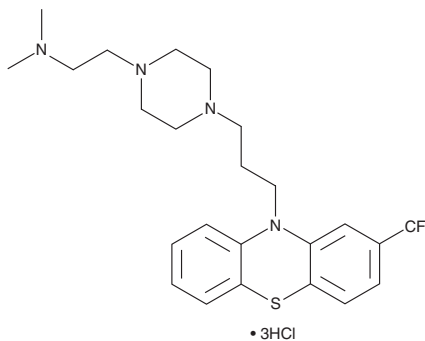
PRODUCT INFORMATION



ZZW-115

Item No. 34974

CAS Registry No.: 10122-45-9
Formal Name: N,N-dimethyl-4-[3-[2-(trifluoromethyl)-10H-phenothiazin-10-yl]propyl]-1-piperazineethanamine, trihydrochloride
MF: C₂₄H₃₁F₃N₄S • 3HCl
FW: 574.0
Purity: ≥95%
UV/Vis.: λ_{max}: 258 nm
Supplied as: A 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

ZZW-115 is supplied as a solid. A stock solution may be made by dissolving the ZZW-115 in the solvent of choice, which should be purged with an inert gas. ZZW-115 is soluble in the organic solvent ethanol.

Description

ZZW-115 is an inhibitor of nuclear protein 1 (NUPR1).¹ It binds to NUPR1 (K_d = 2.1 μM) in a cell-free assay. ZZW-115 is cytotoxic against a panel of 11 pancreatic ductal adenocarcinoma cell lines (IC₅₀s = 0.84-4.93 μM), as well as against a panel of 16 additional cancer cell lines, including glioblastoma, lymphoma, and leukemia cells (IC₅₀s = 0.25-7.75 μM). It induces apoptosis and necrosis in MiaPaCa-2, LIPC, Foie8b, O2-063, and HN14 pancreatic cancer cells when used at concentrations of 3 and 5 μM. ZZW-115 induces accumulation of reactive oxygen species (ROS), lipid peroxidation, and ferroptosis in MiaPaCa-2 cells in a concentration-dependent manner.² It reduces tumor growth in a MiaPaCa-2 mouse xenograft model when administered at doses of 1, 2.5, or 5 mg/kg.¹

References

1. Santofimia-Castaño, P., Xia, Y., Lan, W., *et al.* Ligand-based design identifies a potent NUPR1 inhibitor exerting anticancer activity via necroptosis. *J. Clin. Invest.* **129(6)**, 2500-2513 (2019).
2. Huang, C., Santofimia-Castaño, P., Liu, X., *et al.* NUPR1 inhibitor ZZW-115 induces ferroptosis in a mitochondria-dependent manner. *Cell Death Discov.* **7(1)**, 269 (2021).

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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