

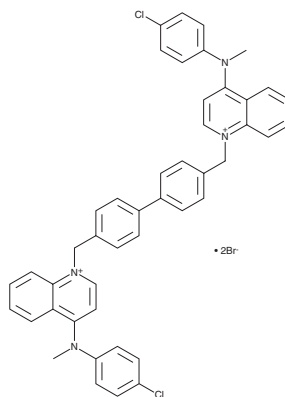
PRODUCT INFORMATION



RSM-932A

Item No. 21518

CAS Registry No.: 850807-63-5
Formal Name: 1,1'-[[[1,1'-biphenyl]-4,4'-diyl]bis(methylene)]bis[4-[(4-chlorophenyl)methylamino]-quinolinium, dibromide
MF: C₄₆H₃₈Cl₂N₄ • 2Br
FW: 877.5
Purity: ≥95%
UV/Vis.: λ_{max}: 233, 255, 364 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

RSM-932A is supplied as a crystalline solid. A stock solution may be made by dissolving the RSM-932A in the solvent of choice, which should be purged with an inert gas. RSM-932A is soluble in the organic solvent DMSO at a concentration of approximately 3 mg/ml.

RSM-932A is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, RSM-932A should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. RSM-932A has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

RSM-932A is a selective inhibitor of choline kinase α (CHOKα; IC₅₀s = 1 and >50 μM for CHOKα and β, respectively).¹ It induces apoptosis via CHOP signaling and endoplasmic reticulum (ER) stress in MDA-MB-231, MCF-7, SW620, and H460 cancer cells, but it only induces cell cycle arrest and not apoptosis in NCM460 and MCF-10A normal epithelial cells.² RSM-932A inhibits the growth of HT-29 colon cancer cells *in vitro* (IC₅₀ = 1.15 μM) and *in vivo* in a mouse xenograft model (ED₅₀ = 7.5 mg/kg).¹

References

1. Lacial, J.C. and Campos, J.M. Preclinical characterization of RSM-932A, a novel anticancer drug targeting the human choline kinase alpha, an enzyme involved in increased lipid metabolism of cancer cells. *Mol. Cancer Ther.* **14(1)**, 31-39 (2015).
2. Sanchez-Lopez, E., Zimmerman, T., Gomez del Pulgar, T., *et al.* Choline kinase inhibition induces exacerbated endoplasmic reticulum stress and triggers apoptosis via CHOP in cancer cells. *Cell Death Dis.* **4(11)**, e933 (2013).

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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