Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

ML171

Catalog No: tcsc0012526

Available Sizes

Size: 100mg

Size: 500mg

Specifications

CAS No:
6631-94-3

Formula:
$C_{14}H_{11}NOS$

Pathway:
Others

Target:
Others

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 64 mg/mL (265.22 mM)

Alternative Names:
2-Acetylphenothiazine;2-APT

Observed Molecular Weight:
241.31

Product Description

ML171 (2-Acetylphenothiazine;2-APT) is a potent and selective **Nox1** inhibitor that blocks Nox1-dependent ROS generation, with an **IC_{50}** of 0.25 μM in HEK293-Nox1 confirmatory assay.

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IC50 & Target: IC50: 0.25 μM (HEK293-Nox1), 0.129 μM (HT29)[1]

In Vitro: Nox1-dependent ROS generation has been shown to play a pivotal role in cell signaling, cell growth, angiogenesis, motility and blood pressure regulation. ML171 strongly blocks ROS generation in HT29 cells (IC_{50}=0.129 μM) and only increasing over-expression of Nox1 can overcome the blockage of ROS generation caused by ML171 treatment in HEK293 cell system reconstituted with all the components required Nox1-dependent ROS generation. ML171 efficiently blocks ROS production measured by carboxy-H2-DCFDA staining as well as DPI used as a positive control. When ML171 is tested in HEK293-Nox1 reconstituted cell system, higher potency in blocking Nox1-dependent ROS generation is observed compared with the parental compound[1].