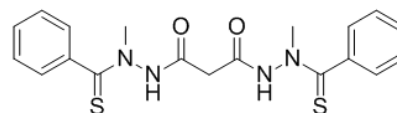


Product Name : Elesclomol
Cat. No. : PC-42855
CAS No. : 488832-69-5
Molecular Formula : C₁₉H₂₀N₄O₂S₂
Molecular Weight : 400.5177
Target : Ferroptosis
Solubility : DMSO: ≥ 22 mg/mL



Biological Activity

Elesclomol (STA-4783) is a potent copper ionophore and promotes copper-dependent cell death (**cuproptosis**), specifically binds ferredoxin 1 (FDX1) α2/α3 helices and β5 strand, inhibits FDX1-mediated Fe-S cluster biosynthesis. Elesclomol (STA-4783) is a small-molecule oxidative stress inducer, exerts selective cytotoxicity by increasing intracellular concentrations of reactive oxygen species (ROS) and induces cell death via mitochondrial apoptosis in cancer cells. Elesclomol (STA-4783) selectively kills cisplatin-resistant tumor cells through increased ROS, markedly enhances the therapeutic index of paclitaxel against human tumor xenograft models.

References

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Kirshner JR, et al. *Mol Cancer Ther.* 2008 Aug;7(8):2319-27.
Wangpaichitr M, et al. *Cancers (Basel).* 2009;1(1):23-38.
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Caution: Product has not been fully validated for medical applications. Lab Use Only!

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