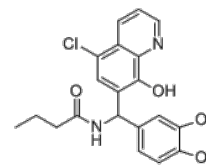


Product Name : YUM70
Cat. No. : PC-72448
CAS No. : 423145-35-1
Molecular Formula : C₂₁H₁₉ClN₂O₄
Molecular Weight : 398.843
Target : Heat Shock Protein (HSP)
Solubility : 10 mM in DMSO



Biological Activity

YUM70 (YUM-70) is a derivative of 8-hydroxyquinoline targeting **GRP78**, and cytotoxic to pancreatic cancer cell lines (MIA PaCa-2 cell IC₅₀=2.5 μM).

YUM70 dose-dependently decreased PANC-1 and UM59 cell proliferation in 3D-culture systems (IC₅₀<10 μM).

YUM70 upregulates UPR target proteins and induces ER stress and apoptosis via phosphorylation of eIF2α.

YUM70 binds to full-length GRP78 and causes a positive shift in the melting temperature (T_m) of GRP78 in a dose-dependent manner.

YUM70 inhibits GRP78 ATPase activity of the full-length protein with IC₅₀ of 1.5 μM.

YUM70 can up-regulate GRP78 transcription and protein levels.

YUM70 reduces tumor growth in a MIA PaCa-2 xenograft model.

References

Soma Samanta, et al. *Cancer Res.* 2021 Apr 1;81(7):1883-1895.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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