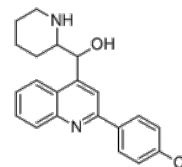


Product Name : Vacquinol-1
Cat. No. : PC-62664
CAS No. : 5428-80-8
Molecular Formula : C₂₁H₂₁ClN₂O
Molecular Weight : 352.862
Target : MEK (MAP2K)
Solubility : 10 mM in DMSO



Biological Activity

Vacquinol-1 (NSC 13316) is a **MKK4 (MAP2K4, MEK4)** activator that induces vacuolization, induces ATP depletion in glioblastoma cells (IC₅₀ = 3.14 μM) without affecting fibroblasts, embryonic stem cells, or osteosarcoma cells. Vacquinol-1 induces rapid and specific cell death of glioma cells via membrane ruffling, cell rounding, massive macropinocytic vacuole accumulation, ATP depletion, and cytoplasmic membrane rupture. Vacquinol-1 shows good brain penetrance and excellent pharmacokinetics; orally bioactive.

References

- Kitambi SS, et al. *Cell*. 2014 Apr 10;157(2):313-28.
- Hammarström LG, et al. *J Med Chem*. 2016 Sep 22;59(18):8577-92.
- Sander P, et al. *Oncotarget*. 2017 May 23;8(21):35124-35137.

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

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