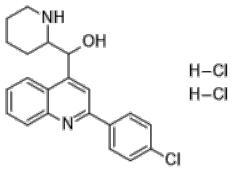
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Data Sheet

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Product Name	:	Vacquinol-1 dihydrochloride
Cat. No.	:	PC-22721
CAS No.	:	2309312-85-2
Molecular Formula	:	$C_{21}H_{23}Cl_3N_2O$
Molecular Weight	:	425.78
Target	:	MEK (MAP2K)
Solubility	:	10 mM in DMSO



Biological Activity

Vacquinol-1 (NSC 13316) dihydrochloride is a specific **MKK4** (**MAP2K4**, MEK4) activator that induces vacuolization, induces ATP depletion in glioblastoma cells (IC50 = 3.14 uM) 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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