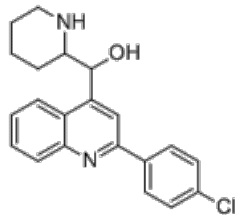


Product Name	: Vacquinol-1	
Synonyms	: NSC 13316	
Cat No.	: M14945	
CAS Number	: 5428-80-8	
Molecular Formula	: C ₂₁ H ₂₁ ClN ₂ O	
Formula Weight	: 352.86	
Chemical Name	: [2-(4-Chlorophenyl)quinolin-4-yl](piperidine-2-yl)methanol	
Description	Vacquinol-1 (NSC 13316) is a MKK4 (MAP2K4, MEK4) activator that induces vacuolization, induces ATP depletion in glioblastoma cells (IC ₅₀ = 3.14 uM) without affecting fibroblasts, embryonic stem cells, or osteosarcoma cells; induces rapid and specific cell death of glioma cells via membrane ruffling, cell rounding, massive macropinocytic vacuole accumulation, ATP depletion, and cytoplasmic membrane rupture; shows good brain penetrance and excellent pharmacokinetics; orally bioactive.	
Pathway	: MAPK/ERK Signaling	
Target	: MEK	
Receptor	: MKK4	
Solubility	Ethanol: <1 mg/mL; DMSO: 70 mg/mL (164.4 mM); Water: <1 mg/mL (< 1 mg/ml refers to the product slightly soluble or insoluble)	
SMILES	: ClC1=CC=C(C2=NC(C=CC=C3)=C3C(C(O)C4NCCCC4)=C2)C=C1	
Storage	: (-20°C)	
Stability	: ≥ 2 years	
Reference	:	

1. Kitambi SS, et al. Cell. 2014 Apr 10;157(2):313-28.| 2. Hammarström LG, et al. J Med Chem. 2016 Sep 22;59(18):8577-92.| 3. Sander P, et al. Oncotarget. 2017 May 23;8(21):35124-35137.