

Catalog # 10-1192 PIT-1

CAS# 53501-41-0
N-[[(3-Chloro-2-hydroxy-5-nitrophenyl)amino]thioxomethyl]benzamide
Lot # X106324

PH domain antagonist. Specifically blocks the binding of PIP3 to the Akt pleckstrin homology domain (IC₅₀ = 31 μ M). Suppresses PI3K-PDK1-Akt-dependent phosphorylation. Induces apoptosis in PTEN-deficient U87MG glioblastoma cells (IC₅₀ = 37 μ M)¹. Inhibiting the binding of PIP3 to effector PH domains is new point of intervention in the PI3K signaling network².

- 1) Miao et al. (2010), Small molecule inhibition of phosphatidylinositol-3,4,5-triphosphate (PIP3) binding to pleckstrin homology domains; Proc. Natl. Acad. Sci. USA, **107** 20126
- 2) McNamara and Degterev (2011), Small-molecule inhibitors of the PI3K signaling network; Future Med. Chem., **3** 549

PHYSICAL DATA

Molecular Weight: 351.76

Molecular Formula: $C_{14}H_{10}CIN_3O_4S$ Purity: 98% by TLC

NMR: (Conforms)

Solubility: Soluble in DMSO (up to 25 mg/ml) or in Ethanol (up to 3 mg/ml)

Physical Description: Grey solid

Storage and Stability: Store as supplied, desiccated at room temperature for up to 1 year from the date of purchase.

Solutions in DMSO or ethanol may be stored at -20°C for up to 2 months.

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