Product Datasheet

NSC668394

Catalog No. **BP-02168** · CAS **382605-72-3** · Form **free base** · Physical state **solid** · Color **Orange to red** · Version **1.0** · Revision **2026-09-04**

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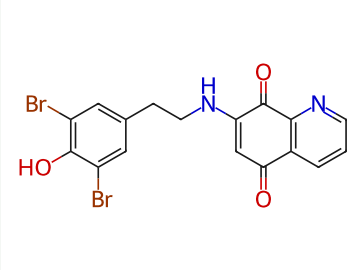
Target	Research area
PKC	**Cancer**

Molecular formula	**$C_{17}H_{12}Br_2N_2O_3$**
Molecular weight	**452.0970**

STRUCTURE



DESCRIPTION

NSC668394 is a potent ezrin (Thr567) phosphorylation inhibitor, with a Kd of 12.59 μM. NSC668394 inhibit ezrin T567 phosphorylation caused by PKCI primarily via their binding to ezrin. NSC668394 can be used to prevent tumor metastasis.

BIOLOGICAL ACTIVITY

In Vitro

NSC668394 (10 μM; pretreated for 15 min) inhibits ezrin T567 phosphorylation (IC50=8.1 μM) and actin binding in vitro.

NSC668394 (1-10 μM; 2-6 h) inhibits ezrin-mediated invasion by K7M2 osteosarcoma (OS) cells on the HUVEC monolayer.

NSC668394 (20 μM) causes significant decrease in growth in JM1 and JM2 rat hepatoma cell lines.

NSC668394 (10 μM) reduces cell motility phenotypes in zebrafish.

In Vivo

NSC668394 (0.226 mg/kg/day; i.p. 5-days a week) inhibits ezrin-dependent in vivo OS metastatic growth in mouse lung.

SOLUBILITY

Soluble in DMSO : 50 mg/mL

REFERENCES

[1]. Bulut G, et, al. Small molecule inhibitors of ezrin inhibit the invasive phenotype of osteosarcoma cells. Oncogene. 2012 Jan 19;31(3):269-81.

[2]. Xue Y, et, al. Phosphorylated Ezrin (Thr567) Regulates Hippo Pathway and Yes-Associated Protein (Yap) in Liver. Am J Pathol. 2020 Jul;190(7):1427-1437.

[3]. Çelik H, et, al. Ezrin Inhibition Up-regulates Stress Response Gene Expression. J Biol Chem. 2016 Jun 17;291(25):13257-70.

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