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Product Information

Product ID N7208

CAS No. 501919-59-1

Chemical Name 2-Hydroxy-4-[[[[(4-methylphenyl)sulfonyl]oxy]acetyl]amino]-

benzoic acid

Svnonvm S3I-201

Formula C₁₆H₁₅NO₇S Formula Wt. 365.36

Melting Point

Purity ≥98%

Solubility DMSO: 25 mg/mL

ОН

Bulk quanitites available upon request

Product ID Size N7208 5 mg N7208 25 mg N7208 100 mg

Store Temp -20°C Ship Temp Ambient

Description NSC-74859 is an inhibitor of pSTAT3 that exhibits anticancer chemotherapeutic, antiviral, anti-fibrotic, and nephroprotective activities. NSC-74859 enhances the toxicity of doxorubicin by inhibiting the epithelial-to-mesenchymal transition (EMT) in vitro; it also enhances the efficacy of cetuximab in hepatic carcinoma cells. In cellular and animal models of hepatocellular cancer, NSC-74859 suppresses cell proliferation and inhibits tumor growth of xenografts. Inhibition of pSTAT3 results in decreased expression of genes encoding cyclin D1, Bcl-xl, and survivin. Additionally, NSC-74859 inhibits replication of varicella-zoster virus (VZV), a herpesvirus. In animal models of kidney injury, NSC-74859 decreases infiltration of inflammatory cells, decreases expression of fibronectin, smooth muscle actin, and collagen type-1 proteins, and inhibits proliferation; together, this increases apoptosis in renal interstitial fibroblasts.

References Kim CK, Ryu WS, Choi IY, et al. Detrimental effects of leptin on intracerebral hemorrhage via the STAT3 signal pathway. J Cereb Blood Flow Metab. 2013 Jun;33(6):944-53. PMID: 23462572.

> Hu QD, Chen W, Yan TL, et al. NSC 74859 enhances doxorubicin cytotoxicity via inhibition of epithelial-mesenchymal transition in hepatocellular carcinoma cells. Cancer Lett. 2012 Dec 28;325(2):207-13. PMID: 22781398.

> Sen N, Che X, Rajamani J, et al. Signal transducer and activator of transcription 3 (STAT3) and survivin induction by varicellazoster virus promote replication and skin pathogenesis. Proc Natl Acad Sci U S A. 2012 Jan 10;109(2):600-5. PMID: 22190485.

> Chen W. Shen X. Xia X. et al. NSC 74859-mediated inhibition of STAT3 enhances the anti-proliferative activity of cetuximab in hepatocellular carcinoma. Liver Int. 2012 Jan;32(1):70-7. PMID: 22098470.

> Pang M, Ma L, Gong R, et al. A novel STAT3 inhibitor, S3I-201, attenuates renal interstitial fibroblast activation and interstitial fibrosis in obstructive nephropathy. Kidney Int. 2010 Aug;78(3):257-68. PMID: 20520592.

> Lin L, Amin R, Gallicano GI, et al. The STAT3 inhibitor NSC 74859 is effective in hepatocellular cancers with disrupted TGF-beta signaling. Oncogene. 2009 Feb 19;28(7):961-72. PMID: 19137011.

Siddiquee K, Zhang S, Guida WC, et al. Selective chemical probe inhibitor of Stat3, identified through structure-based virtual screening, induces antitumor activity. Proc Natl Acad Sci U S A. 2007 May 1;104(18):7391-6. PMID: 17463090.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.