

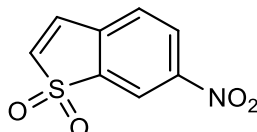
Catalog # 10-2524

Stattic

19983-44-9

6-Nitrobenzo[b]thiophene 1,1-dioxide

Lot # X105444



STAT3 inhibitor. Inhibits binding of tyrosine-phosphorylated peptides to STAT3 SH2 domain and inhibiting STAT3 activation, dimerization and nuclear translocation¹. Displays selectivity over STAT1, STAT5, c-Myc/Max, Jun/Jun and Lck. Induces apoptosis in STAT3-dependent cancer cell lines. Alkylates four cysteine residues on STAT3². Exhibits potent antitumor activity³. Protects against angiotensin II-induced vascular dysfunction and hypertension⁴. An extremely useful tool to probe involvement of STAT3 in cellular signaling.

- 1) Schust *et al.* (2006), *Stattic: a small molecule inhibitor of STAT3 activation and dimerization*; Chem. Biol., **13** 1235
- 2) Heidelberger *et al.* (2013), *Investigation of the protein alkylation sites of the STAT3:STAT3 inhibitor Stattic by mass spectrometry*; Bioorg. Med. Chem. Lett., **23** 4719
- 3) Pan *et al.* (2013), *Stat3 inhibitor Stattic exhibits potent anti-tumor activity and induces chemo- and radio-sensitivity in nasopharyngeal carcinoma*; PLoS One, **8(1)** e54565
- 4) Johnson *et al.* (2013), *Small-molecules inhibitors of signal transducer and activator of transcription 3 protect against angiotensin II-induced vascular dysfunction and hypertension*; Hypertension, **61** 437

PHYSICAL DATA

Molecular Weight:	211.20
Molecular Formula:	C ₈ H ₅ NO ₄ S
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 10 mg/ml) or Ethanol (up to 1 mg/ml)
Physical Description:	Light yellow solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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