

**Product Name:** STF 31

**Catalog No.:** 4484

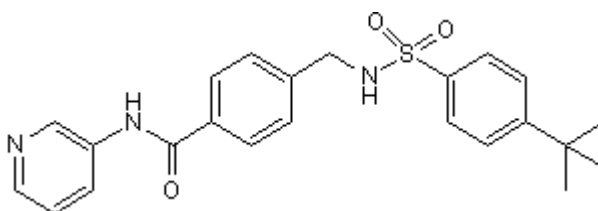
**Batch No.:** 2

CAS Number: 724741-75-7

IUPAC Name: 4-[[[4-(1,1-Dimethylethyl)phenyl]sulfonyl]amino]methyl]-*N*-3-pyridinylbenzamide

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>23</sub>H<sub>25</sub>N<sub>3</sub>O<sub>3</sub>S  
**Batch Molecular Weight:** 423.53  
**Physical Appearance:** Yellow solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.54 (Dichloromethane:Methanol [95:5])  
**HPLC:** Shows >99.7% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	65.23	5.95	9.92
Found	65.05	5.99	9.74

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

Inhibitor of GLUT1; inhibits glucose uptake in renal cell carcinoma (RCC) 4 cells. Activity causes necrotic cell death in von Hippel-Lindau (VHL)-deficient RCC cells. Also NAMPT inhibitor. Eliminates human pluripotent stem cells from culture with limited toxicity towards differentiated cells.

**Physical and Chemical Properties:**

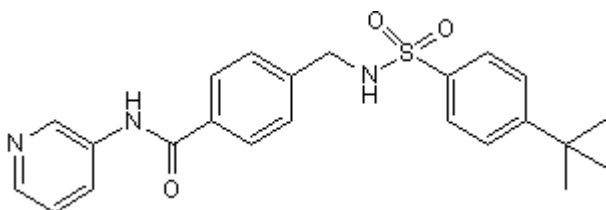
Batch Molecular Formula: C<sub>23</sub>H<sub>25</sub>N<sub>3</sub>O<sub>3</sub>S

Batch Molecular Weight: 423.53

Physical Appearance: Yellow solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**References:**

**Kropp *et al*** (2015) Inhibition of an NAD<sup>+</sup> salvage pathway provides efficient and selective toxicity to human pluripotent stem cells. *Stem Cells Transl.Med.* **4** 483. PMID: 25834119.

**Adams *et al*** (2014) NAMPT is the cellular target of STF-31-like small-molecule probes. *ACS Chem.Biol.* **9** 2247. PMID: 25058389.

**Chan *et al*** (2011) Targeting GLUT1 and the Warburg effect in renal cell carcinoma by chemical synthetic lethality. *Sci.Transl.Med.* **3** 94ra70. PMID: 21813754.

**Storage:** Store at RT

**Solubility & Usage Info:**

DMSO to 100 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

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**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel:+1 612 379 2956