

# **Certificate of Analysis**

Print Date: Oct 1st 2021

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Product Name: STX 64 Catalog No.: 7341 Batch No.: 1

CAS Number: 288628-05-7

IUPAC Name: 6,7,8,9,10,11-Hexahydro-6-oxobenzo[b]cyclohepta[d]pyran-3-yl sulfamate

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>14</sub>H<sub>15</sub>NO<sub>5</sub>S.

Batch Molecular Weight: 309.34

Physical Appearance: Off White solid

**Solubility:** DMSO to 100 mM

ethanol to 10 mM

Storage: Store at -20°C

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

**HPLC:** Shows 98.2% purity

<sup>1</sup>H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 54.36 4.89 4.53 Found 54.43 4.9 4.57

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



# **Product Information**

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#### **Description:**

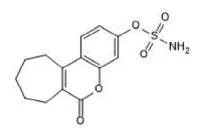
STX 64 is a potent steroid sulfatase inhibitor (IC $_{50}$  = 8 nM). Estrone sulfate-stimulated uterine growth and mammary tumor growth are inhibited by STX 64 in animal models. STX 64 shows inhibition of steroid sulfatase activity in peripheral blood lymphocytes, liver and tumor tissues and is active in vivo. STX 64 is also a potent inhibitor of carbonic anhydrase II (IC $_{50}$  = 25 nM).

# **Physical and Chemical Properties:**

Batch Molecular Formula:  $C_{14}H_{15}NO_5S$ . Batch Molecular Weight: 309.34 Physical Appearance: Off White solid

**Minimum Purity:** ≥98%

### **Batch Molecular Structure:**



Storage: Store at -20°C

# Solubility & Usage Info:

DMSO to 100 mM ethanol to 10 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.

#### References:

**Ho** *et al* (2003) Inhibition of carbonic anhydrase II by steroidal and non-steroidal sulphamates. Biochem.Biophys.Res.Commun. *305* 909. PMID: 12767917.

Raobaikady et al (2003) Inhibition of MCF-7 breast cancer cell proliferation and in vivo steroid sulphatase activity by 2-methoxyoestradiol-bis-sulphamate. J.Steroid Biochem.Mol.Biol. 84 351. PMID: 12711022.

**Purohit** et al (2000) In vivo inhibition of estrone sulfatase activity and growth of nitrosomethylurea-induced mammary tumors by 667 COUMATE. Cancer Res. 60 3394. PMID: 10910045.