# **Certificate of Analysis**

#### Print Date: Oct 21st 2021

### www.tocris.com

#### Product Name: Sulfasalazine

TOCR

biotechne

CAS Number: 599-79-1 **IUPAC Name:** 5-[[4-(2-Pyridylsulfamoyl)phenyl]azo]salicylic acid

#### Catalog No.: 4935 EC Number: 209-974-3

Batch No.: 2

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula: Batch Molecular Weight: Physical Appearance:** Solubility: Storage: **Batch Molecular Structure:**  C<sub>18</sub>H<sub>14</sub>N<sub>4</sub>O<sub>5</sub>S. 398.39 Orange solid DMSO to 100 mM Store at RT

OH \_<sup>N</sup>≈N<sup>\_</sup>

## 2. ANALYTICAL DATA HPLC: <sup>1</sup>H NMR:

Mass Spectrum: **Microanalysis:** 

Shows 97.0% purity Consistent with structure Consistent with structure

Carbon Hydrogen Nitrogen Theoretical 54.27 3.54 14.06 Found 54.26 3.5 14.02

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

bio-techne.com **North America** China **Europe Middle East Africa Rest of World** info@bio-techne.com Tel: (800) 343 7475 info.cn@bio-techne.com Tel: +44 (0)1235 529449 www.tocris.com/distributors Tel:+1 612 379 2956 Tel: +86 (21) 52380373 techsupport@bio-techne.com

## TOCRIS a biotechne brand

## www.tocris.com

Print Date: Oct 21st 2021

Batch No.: 2

#### Product Name: Sulfasalazine

CAS Number: 599-79-1 IUPAC Name: 5-[[4-(2-Pyridylsulfamoyl)phenyl]azo]salicylic acid

#### **Description:**

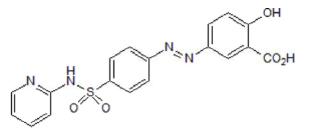
Sulfasalazine is an inhibitor of NF- $\kappa$ B activation. Inhibits in vitro growth of the human pancreatic cancer cell lines MIA PaCa-2 and PANC-1, and induces apoptosis in glioblastoma cell lines. Also inhibits the cystine-glutamate antiporter, system X<sub>c</sub> (SXC). Inhibitor of folate transporter 1 (SLC19A1); inhibits cellular uptake of Methotrexate (Cat. No. 1230) and cyclic dinucleotides, including 2',3'-cGAMP (Cat.No. 5945). Anti-inflammatory. Induces ferroptosis.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>18</sub>H<sub>14</sub>N<sub>4</sub>O<sub>5</sub>S. Batch Molecular Weight: 398.39 Physical Appearance: Orange solid

#### Minimum Purity: ≥97%

#### **Batch Molecular Structure:**



#### 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).

Catalog No.: 4935

EC Number: 209-974-3

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:**

Luteijn *et al* (2019) SLC19A1 transports immunoreactive cyclic dinucleotides. Nature *573* 434. PMID: 31511694.
Xie *et al* (2016) Ferroptosis: process and function. Cell Death Differ. *23* 369. PMID: 26794443.
Sontheimer and Bridges (2012) Sulfasalazine for brain cancer fits. Expert Opin.Invest.Drugs *21* 575. PMID: 22404218.

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

bio-techne.comNorth AmericaChinaEurope Middle East AfricaRest of Worldinfo@bio-techne.comTel: (800) 343 7475info.cn@bio-techne.comTel: +44 (0) 1235 529449www.tocris.com/distributorstechsupport@bio-techne.comTel: +86 (21) 52380373Tel: +44 (0) 1235 529449tel: +1 612 379 2956