

**Product Name:** 

# **Certificate of Analysis**

Print Date: Jan 14th 2016

www.tocris.com

Catalog No.: 4324 Batch No.: 1

CAS Number: 927822-86-4

IUPAC Name: N,N-(Dithiodi-2,1-ethanediyl)bis[2,5-dichlorobenzenesulfonamide

# 1. PHYSICAL AND CHEMICAL PROPERTIES

KC7F2

Batch Molecular Formula:  $C_{16}H_{16}CI_4N_2O_4S_4$ 

Batch Molecular Weight: 570.38

Physical Appearance: White solid

Solubility: DMSO to 100 mM Storage: Store at -20°C

**Batch Molecular Structure:** 

### 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.45$  (Ethyl acetate:Petroleum ether [2:3])

HPLC: Shows 98.7% purity

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

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen Sulfur
Theoretical 33.69 2.83 4.91 22.49

Found 34.02 2.94 4.83 22.67



# **Product Information**

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# **Description:**

Inhibitor of HIF-1 $\alpha$ . Thought to act via down-regulation of HIF-1 $\alpha$  protein synthesis; reduces phosphorylation of eIF4E binding protein 1 (4EBP1) and p70 S6K in hypoxic conditions. Also blocks hypoxia-induced HIF-1 $\alpha$  accumulation in a range of human cancer cell lines. Inhibits the expression of HIF target genes, such as carbonic anhydrase IX and MMP2.

# **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>16</sub>H<sub>16</sub>Cl<sub>4</sub>N<sub>2</sub>O<sub>4</sub>S<sub>4</sub>

Batch Molecular Weight: 570.38 Physical Appearance: White solid

Minimum Purity: >98%

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

Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

### 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.

#### References:

Narita *et al* (2009) Identification of a novel small molecule HIF-1α translation inhibitor. Clin.Cancer Res. *15* 6128. PMID: 19789328. **Koh** *et al* (2009) Inhibiting the hypoxia response for cancer therapy: the new kid on the block. Clin.Cancer Res. *15* 5945. PMID: 19789327.