

**Product Name:** TC-E 5003

**Catalog No.:** 5099

**Batch No.:** 1

**CAS Number:** 17328-16-4

**IUPAC Name:** *N,N'*-(Sulfonyldi-4,1-phenylene)bis(2-chloroacetamide)

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{16}H_{14}Cl_2N_2O_4S \cdot H_2O$

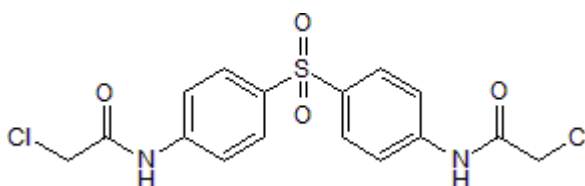
**Batch Molecular Weight:** 419.28

**Physical Appearance:** Off-white powder

**Solubility:** DMSO to 50 mM

**Storage:** Store at +4°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.55$  (Ethyl acetate)

**HPLC:** Shows >98.9% purity

**$^1H$  NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	45.83	3.85	6.68
Found	45.9	3.85	6.56

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**Description:**

Selective protein arginine methyltransferase 1 (PRMT1) inhibitor ( $IC_{50}$  = 1.5  $\mu$ M); exhibits no inhibitory activity against CARM1 and Set7/9 methyltransferases. Inhibits growth of MCF7a breast cancer cells and LNCaP prostate cancer cells. Attenuates androgen-induced gene expression in LNCaP cells.

**Physical and Chemical Properties:**

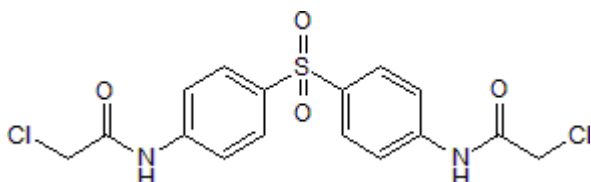
Batch Molecular Formula:  $C_{16}H_{14}Cl_2N_2O_4S \cdot H_2O$

Batch Molecular Weight: 419.28

Physical Appearance: Off-white powder

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 50 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:**

**Bissinger et al** (2011) Acyl derivatives of *p*-aminosulfonamides and dapsone as new inhibitors of the arginine methyltransferase hPRMT1. *Bioorg.Med.Chem.* **19** 3717. PMID: 21440447.

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