

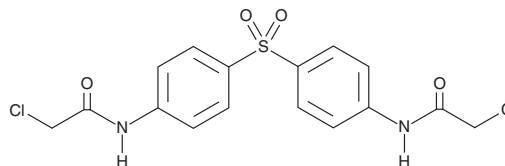
# PRODUCT INFORMATION



## TC-E 5003

Item No. 17718

**CAS Registry No.:** 17328-16-4  
**Formal Name:** N,N'-(sulfonyldi-4,1-phenylene)bis[2-chloro]-acetamide  
**Synonym:** NSC 30176  
**MF:** C<sub>16</sub>H<sub>14</sub>Cl<sub>2</sub>N<sub>2</sub>O<sub>4</sub>S  
**FW:** 401.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 257, 283 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

TC-E 5003 is supplied as a crystalline solid. A stock solution may be made by dissolving the TC-E 5003 in the solvent of choice, which should be purged with an inert gas. TC-E 5003 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of TC-E 5003 in these solvents is approximately 30 mg/ml.

### Description

TC-E 5003 is an inhibitor of protein arginine methyltransferase 1 (PRMT1; IC<sub>50</sub> = 1.5 μM for human PRMT1 in a methylation assay).<sup>1</sup> It is selective for PRMT1 over PRMT4/CARM1 and SET7/9 methyltransferases, with less than 5% inhibition at a concentration of 50 μM for SET7/9. TC-E 5003 inhibits growth of MCF-7a breast cancer and LNCaP prostate cancer cells (GI<sub>50</sub>s = 1.97 and 4.49 μM, respectively) and decreases androgen-dependent gene transcription *in vitro*. TC-E 5003 (80 mg/kg) also has antimalarial properties and eradicates *P. berghei* in mice.<sup>2</sup>

### References

1. Bissinger, E.M., Heinke, R., Spannhoff, A., *et al.* Acyl derivatives of *p*-aminosulfonamides and dapsone as new inhibitors of the arginine methyltransferase hPRMT1. *Bioorg. Med. Chem.* **19(12)**, 3717-3731 (2011).
2. Prescott, B. Potential antimalarial agents. Derivatives of 4,4'-diaminodiphenylsulfone. *Int. Z. Klin. Pharmacol. Ther. Toxikol.* **4(2)**, 207-211 (1971).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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