

Product Data Sheet

Product Name: TC-E 5003

Cat. No.: GC17672

Chemical Properties

Cas. No. 17328-16-4

Chemical Name N,N'-(sulfonylbis(4,1-phenylene))bis(2-chloroacetamide)

SMILES ClCC(=O)NC1=CC=C(C=C1)S(=O)(C2=CC=C(NC(=O)CCl)=CC=C2)C3=CC=C(NC(=O)CCl)=CC=C3

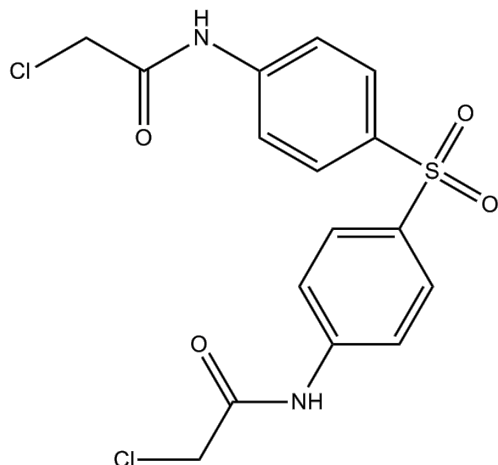
Formula $C_{16}H_{14}Cl_2N_2O_4S$ M.Wt 401.26

Solubility DMF: 30 mg/ml, DMSO: 30 mg/ml Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

TC-E 5003 is a selective inhibitor of PRMT1 with IC₅₀ value of 1.5 μM [1].

PRMT1 is a member of the protein arginine N-methyltransferase (PRMT) family and plays a pivotal role in many biological processes by post-translational modification of target proteins. It has been reported that PRMT1 abnormal expression was observed in many types of cancer and its inhibitors was regarded as promising target in clinic [2].

Caution: Product has not been fully validated for medical applications. For research use only.

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TC-E 5003 is a potent PRMT1 inhibitor. When tested with breast cancer cell line MCF7a or prostate cancer cell line LNCaP, TC-E treatment induced cell apoptosis and inhibited cell proliferation by functioning on PRMT1. And it also reported that TC-E treatment attenuated androgen-induced gene expression in LNCaP cells [1].

References:

- [1]. Bissinger, E.M., et al., *Acyl derivatives of p-aminosulfonamides and dapsone as new inhibitors of the arginine methyltransferase hPRMT1. Bioorg Med Chem*, 2011. 19(12): p. 3717-31.
- [2]. Avasarala, S., et al., *PRMT1 is a Novel Regulator of Epithelial-Mesenchymal-Transition in Non-Small Cell Lung Cancer. J Biol Chem*, 2015.

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