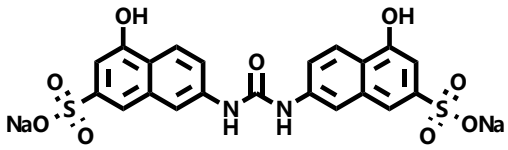
Xcess Biosciences Inc.
7144 N Harlem Ave #169
Chicago, IL 60631 USA

http://www.xcessbio.com
Toll free: 1-866-706-2330
Fax: 1-619- 810-0718
Email: info@xcessbio.com

Histone Methyltransferase Inhibitor– AMI-1

Chemical Name: sodium 7,7'-(carbonylbis(azanediyl))bis(4-hydroxynaphthalene-2-sulfonate)



Molecular Weight:	548.45
Formula:	$C_{21}H_{14}N_2Na_2O_9S_2$
Purity:	≥98%
CAS#:	20324-87-2
Solubility:	DMSO up to 100 mM Water up to 100 mM
Storage	Powder: 4°C 1 year DMSO: 4°C 3 month -20°C 1 year

Biological Activity:

AMI-1 is a potent and specific small molecule inhibitor of histone methyltransferase with IC_{50} of 3.0 μM and 8.8 μM for yeast Hmt1p and human PRMT1, respectively. In HeLa cells, AMI-1 inhibits methylation levels of GFP-Npl3 fusion and endogenous PRMT1-like activity. It also inhibits nuclear receptor-mediated transactivation of a luciferase reporter in MCF7 cells. In chronic AIPI rats, AMI-1 (5 μg/rat) ameliorates COX2 expression and asthmatic indexes, and decreases the airway and alveoli lesions, mucus secretion, and collagen deposition in lungs.

How to Use:

In vitro: AMI-1 was used at 10-30 μM final concentration in vitro and in cellular assays.

In vivo: AMI-1 was dosed by intranasal injection to Chronic AIPI rats at 50 μL (concentration of 0.1 mg/mL).

Reference:

1. Cheng D, et al. Small molecule regulators of protein arginine methyltransferases. (2004) J Biol Chem. 279(23):23892-9.
2. Sun Q, et al. PRMT1 Upregulated by Epithelial Proinflammatory Cytokines Participates in COX2 Expression in Fibroblasts and Chronic Antigen-Induced Pulmonary Inflammation. (2015) J Immunol. 195(1):298-306.