

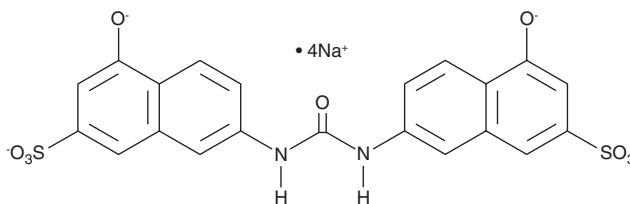
# PRODUCT INFORMATION



## AMI-1 (sodium salt)

Item No. 13965

**Formal Name:** 7,7'-(carbonylbis(azanediyl))bis(4-oxidonaphthalene-2-sulfonate), sodium salt  
**Synonym:** Arginine N-Methyltransferase Inhibitor-1  
**MF:** C<sub>21</sub>H<sub>12</sub>N<sub>2</sub>O<sub>9</sub>S<sub>2</sub> • 4Na  
**FW:** 592.4  
**Purity:** ≥98%  
**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

AMI-1 (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the AMI-1 (sodium salt) in water. The solubility of AMI-1 (sodium salt) in water is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

AMI-1 is a cell permeable inhibitor of PRMTs. It inhibits both yeast Type I arginine methyltransferase Hmt1p and human PRMT1 (IC<sub>50</sub> = 3.0 and 8.8 μM, respectively).<sup>1</sup> AMI-1 also effectively blocks the activity of PRMTs 3, 4, and 6 but not that of either SET (Sub39H1, Suv39H2, SET7) or non-SET (DOT1) lysine methyltransferases.<sup>1</sup> The mechanism of inhibition of PRMTs by AMI-1 involves blocking peptide-substrate binding.<sup>2</sup> AMI-1 also inhibits HIV-1 reverse transcriptase (IC<sub>50</sub> = 5.0 μM).<sup>3</sup>

### References

1. Cheng, D., Yadav, N., King, R.W., *et al.* Small molecule regulators of protein arginine methyltransferases. *J. Biol. Chem.* **279**(23), 23892-23899 (2004).
2. Feng, Y., Xie, N., Wu, J., *et al.* Inhibitory study of protein arginine methyltransferase 1 using a fluorescent approach. *Biochem. Biophys. Res. Commun.* **379**(2), 567-572 (2009).
3. Skillman, A.G., Maurer, K.W., Roe, D.C., *et al.* A novel mechanism for inhibition of HIV-1 reverse transcriptase. *Bioorg. Chem.* **30**(6), 443-458 (2002).

#### 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.

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