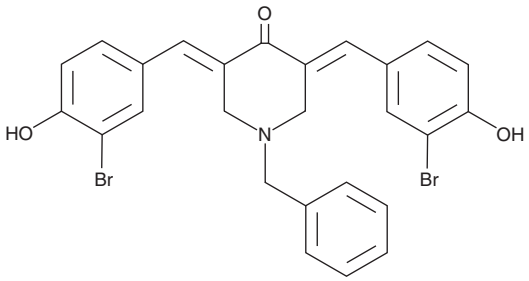
PRODUCT INFORMATION

PRMT4/CARM1 Inhibitor

Item No. 11033

CAS Registry No.: 1020399-49-8
Formal Name: 3,5-*bis*[(3-bromo-4-hydroxyphenyl)methylene]-1-(phenylmethyl)-4-piperidinone
Synonym: Protein Arginine Methyltransferase 4/ Coactivator-Associated Arginine Methyltransferase 1 Inhibitor
MF: $C_{26}H_{21}Br_2NO_3$
FW: 555.3
Purity: ≥95%
UV/Vis.: λ_{max}: 250, 367 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

PRMT4/CARM1 inhibitor is supplied as a crystalline solid. A stock solution may be made by dissolving the PRMT4/CARM1 inhibitor in the solvent of choice, which should be purged with an inert gas. PRMT4/CARM1 inhibitor is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of PRMT4/CARM1 inhibitor in ethanol is approximately 0.25 mg/ml and approximately 30 mg/ml in DMSO and DMF.

PRMT4/CARM1 inhibitor is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PRMT4/CARM1 inhibitor should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. PRMT4/CARM1 inhibitor has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

PRMT4/CARM1 Inhibitor selectively blocks the activity of PRMT4/CARM1 with an IC_{50} value of 7.1 µM.[1] It displays very low affinity towards PRMT1 and SET7 with IC_{50} values of 63 and 943 µM, respectively.[1] In human prostate cancer LNCaP cells, this compound reduced the prostate-specific antigen promoter activity at 8-10 µM.[1]

Reference

1. Cheng, D., Valente, S., Castellano, S., *et al.* Novel 3,5-*bis*(bromohydroxybenzylidene)piperidin-4-ones as coactivator-associated arginine methyltransferase 1 inhibitors: Enzyme selectivity and cellular activity. *J. Med. Chem.* **54(13)**, 4982-4932 (2011).

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