

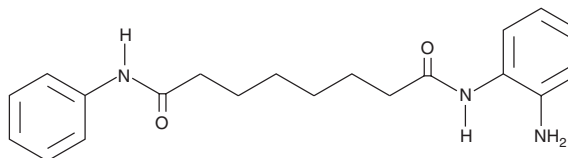
PRODUCT INFORMATION



BML-210

Item No. 10005019

CAS Registry No.: 537034-17-6
Formal Name: N-(2-aminophenyl)-N'-phenyl-octanediamide
Synonyms: N-phenyl-N'-(2-Aminophenyl) hexamethylenediamide, CAY10433
MF: $C_{20}H_{25}N_3O_2$
FW: 339.4
Purity: $\geq 95\%$
UV/Vis.: λ_{max} : 241 nm
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 2 years



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

Laboratory Procedures

BML-210 is supplied as a crystalline solid. A stock solution may be made by dissolving the BML-210 in an organic solvent purged with an inert gas. BML-210 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of BML-210 is 1 mg/ml in ethanol and 30 mg/ml in DMSO and DMF.

BML-210 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BML-210 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. BML-210 has a solubility of 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Inhibition of histone deacetylase (HDAC) enzymes by compounds such as trichostatin A can have wide ranging effects in cancer, cell differentiation, and other aspects of gene expression regulation.¹ BML-210 is a small molecule inhibitor of HDAC with an IC_{50} value of 30 μM when tested in HeLa cell nuclear extracts using 200 μM acetylated fluorometric substrate² (substrate available in Cayman's HDAC Activity and Inhibitor Screening Assay Kits - Item Nos. 10011563 and 10011564). BML-210 also inhibits the deacetylation of the transcription factor FOXO3 by mammalian SIRT1 in cells oxidatively stressed by hydrogen peroxide.³

References

1. Yoshida, M., Kijima, M., Akita, M., *et al.* Potent and specific inhibition of mammalian histone deacetylase both *in vivo* and *in vitro* by trichostatin A. *J. Biol. Chem.* **265**(28), 17174-17179 (1990).
2. Jennifer Johnson. Personal Communication. (2007).
3. Brunet, A., Sweeney, L.B., Sturgill, J.F., *et al.* Stress-dependent regulation of FOXO transcription factors by the SIRT1 deacetylase. *Science* **303**, 2011-2015 (2004).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/12/2017

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM