



LKT Laboratories, Inc.

MGCD-0103

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Product Information

Product ID M2409

CAS No. 726169-73-9

Chemical Name

Synonym Mocetinostat

Formula $C_{23}H_{20}N_6O$

Formula Wt. 396.44

Melting Point

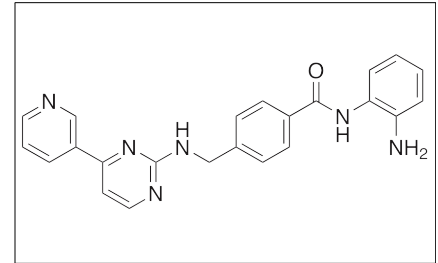
Purity $\geq 98\%$

Solubility DMSO 13 mg/mL (32.79 mM)
Water Insoluble
Ethanol Insoluble

Store Temp $-20^{\circ}C$

Ship Temp Ambient

Description MGCD-0103 is a benzamide histone deacetylase (HDAC) inhibitor that exhibits anticancer chemotherapeutic, anti-fibrotic, antihypertensive, and cardiomodulatory activities. MGCD-0103 is currently in clinical trials as a potential treatment for several leukemias and lymphomas. In sham hearts, MGCD-0103 improves left ventricular and end diastolic pressure and decreases total collagen levels; in CD90+ cells, it decreases levels of collagen III, matrix metalloproteinase 2, and α -SMA. In other models, MGCD-0103 increases natriuretic peptide receptor (NPR1) promoter activity, increasing transcription of guanyl cyclase A/natriuretic peptide receptor A. MGCD-0103 also decreases pulmonary artery pressure, right ventricular hypertrophy, and vascular remodeling in animal models of myocardial infarction and heart failure. Additionally, this compound induces apoptosis, activates PI3K/Akt/mTOR signaling, and decreases autophagy in chronic lymphocytic leukemia (CLL) cells.



Bulk quantities available upon request

Product ID	Size
M2409	5 mg
M2409	25 mg
M2409	50 mg

References Nural-Guvener HF, Zakharova L, Nimlos J, et al. HDAC class I inhibitor, Mocetinostat, reverses cardiac fibrosis in heart failure and diminishes CD90+ cardiac myofibroblast activation. *Fibrogenesis Tissue Repair*. 2014 Jul 2;7:10. PMID: 25024745.

Kumar P, Tripathi S, Pandey KN. Histone deacetylase inhibitors modulate the transcriptional regulation of guanylyl cyclase/natriuretic peptide receptor-a gene: interactive roles of modified histones, histone acetyltransferase, p300, AND Sp1. *J Biol Chem*. 2014 Mar 7;289(10):6991-7002. PMID: 24451378.

El-Khoury V, Pierson S, Szwarcbart E, et al. Disruption of autophagy by the histone deacetylase inhibitor MGCD0103 and its therapeutic implication in B-cell chronic lymphocytic leukemia. *Leukemia*. 2014 Aug;28(8):1636-46. PMID: 24418989.

Cavasin MA, Demos-Davies K, Horn TR, et al. Selective class I histone deacetylase inhibition suppresses hypoxia-induced cardiopulmonary remodeling through an antiproliferative mechanism. *Circ Res*. 2012 Mar 2;110(5):739-48. PMID: 22282194.

Younes A, Oki Y, Bociek RG, et al. Mocetinostat for relapsed classical Hodgkin's lymphoma: an open-label, single-arm, phase 2 trial. *Lancet Oncol*. 2011 Dec;12(13):1222-8. PMID: 22033282.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.