



LKT Laboratories, Inc.

MC1568

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Product Information

Product ID M0803

CAS No. 852475-26-4

Chemical Name (2E)-3-{4-[(1E)-3-(3-Fluorophenyl)-3-oxo-1-propen-1-yl]-1-methyl-1H-pyrrol-2-yl}-N-hydroxyacrylamide

Synonym

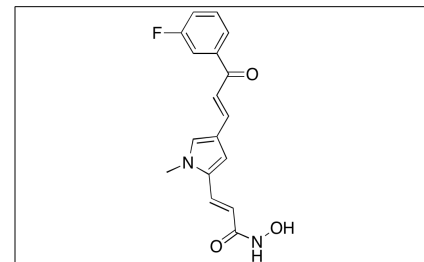
Formula C₁₇H₁₅FN₂O₃

Formula Wt. 314.32

Melting Point

Purity ≥98%

Solubility 100mM in DMSO



Bulk quantities available upon request

Product ID **Size**

M0803 5 mg

M0803 25 mg

Store Temp -20° C

Ship Temp Ambient

Description MC1568 interferes with myogenic signaling by blocking HDAC enzymatic activity and MEF2-mediated transactivation in C2C12 cells. Exposure of rat intestinal epithelial cell line EIC-18 to MC1568 prevented stimulation of DNA synthesis and blocked cell cycle progression in the G0/G1 phase. In a mice carotid ligation model, MC1568 has been shown to mediate proliferation and migration of smooth muscle cells in vitro, and thus may reduce blood pressure in hypertensive animals.

References Nebbioso A, Manzo F, Miceli M, et al. Selective class II HDAC inhibitors impair myogenesis by modulating the stability and activity of HDAC-MEF2 complexes. *EMBO Rep.* 2009 Jul;10(7):776-782. PMID: 19498465.

Sinnett-Smith J, Ni Y, Wang J, et al. Protein kinase D1 mediates class IIa histone deacetylase phosphorylation and nuclear extrusion in intestinal epithelial cells: role in mitogenic signaling. *Am J Physiol Cell Physiol.* 2014 May 15;306(10):C961-C971. PMID: 24647541.

Usui T, Morita T, Okada M, Yamawaki H. Histone deacetylase 4 controls neointimal hyperplasia via stimulating proliferation and migration of vascular smooth muscle cells. *Hypertension.* 2014 Feb;63(2):397-403. PMID: 24166750.

Lemon DD, Harrison BC, Horn TR, et al. Promiscuous actions of small molecule inhibitors of the protein kinase D-class IIa HDAC axis in striated muscle. *FEBS Lett.* 2015 Apr 28;589(10):1080-1088. PMID: 25816750.

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