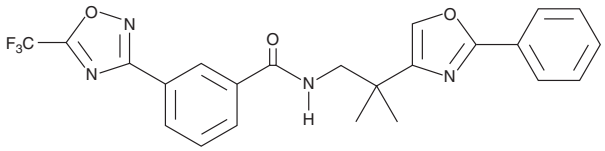
PRODUCT INFORMATION

TMP-195

Item No. 23242

CAS Registry No.:	1314891-22-9
Formal Name:	N-[2-methyl-2-(2-phenyl-4-oxazolyl)propyl]-3-[5-(trifluoromethyl)-1,2,4-oxadiazol-3-yl]-benzamide
MF:	$C_{23}H_{19}F_3N_4O_3$
FW:	456.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 209, 270 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

TMP-195 is supplied as a crystalline solid. A stock solution may be made by dissolving the TMP-195 in the solvent of choice, which should be purged with an inert gas. TMP-195 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of TMP-195 in these solvents is approximately 10 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of TMP-195 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of TMP-195 in PBS, pH 7.2, is approximately 0.2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

TMP-195 is an inhibitor of class IIa histone deacetylases (HDACs; K_is = 59, 60, 26, and 15 nM for HDAC4, 5, 7, and 9, respectively).[1] It is selective for class IIa HDACs over class I and class IIb HDACs (K_is = 10-43 µM for HDAC1-3, 6, 9, and 10-11). TMP-195 blocks accumulation of chemoattractant chemokine ligand 2 (CCL2) in the supernatant of monocytes stimulated with macrophage colony-stimulating factor (CSF-1). It increases secretion of CCL1 by monocytes stimulated with CSF-1 and granulocyte/monocyte colony-stimulating factor (GM-CSF). *In vivo*, TMP-195 reduces tumor burden and the number of pulmonary metastases in a macrophage-dependent autochthonous mouse model of breast cancer.[2]

References

1. Lobera, M., Madauss, K.P., Pohlhaus, D.T., *et al.* Selective class IIa histone deacetylase inhibition via a nonchelating zinc-binding group. *Nat. Chem. Biol.* **9(5)**, 319-325 (2013).
2. Guerriero, J.L., Sotayo, A., Ponichtera, H.E., *et al.* Class IIa HDAC inhibition reduces breast tumours and metastases through anti-tumour macrophages. *Nature* **543(7645)**, 428-432 (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