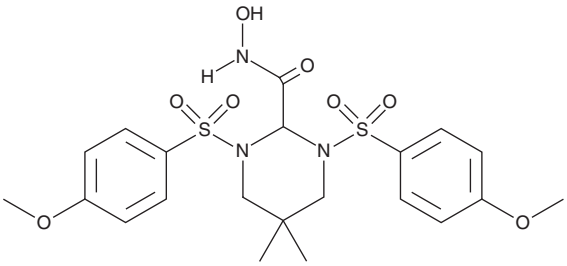
PRODUCT INFORMATION

MMP Inhibitor II

Item No. 15958

CAS Registry No.:	203915-59-7
Formal Name:	hexahydro-N-hydroxy-1,3-bis[(4-methoxyphenyl)sulfonyl]-5,5-dimethyl-2-pyrimidinecarboxamide
Synonyms:	Matrix Metalloproteinase Inhibitor II, NHDDPC, PG 117025, PGE 4410186
MF:	$C_{21}H_{27}N_3O_8S_2$
FW:	513.6
Purity:	≥95%
UV/Vis.:	λ_{max}: 244 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

MMP inhibitor II is supplied as a crystalline solid. A stock solution may be made by dissolving the MMP inhibitor II in the solvent of choice, which should be purged with an inert gas. MMP inhibitor II is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of MMP inhibitor II in these solvents is approximately 0.5, 20, and 30 mg/ml, respectively.

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

Description

Matrix metalloproteinases (MMPs) belong to a family of proteases that play a crucial role in tissue remodeling and repair by degrading extracellular matrix proteins to enable cell migration.[1] MMP Inhibitor II is a reversible, broad-range inhibitor of MMPs. It has been reported to inhibit MMP-1 (IC_{50} = 24 nM), MMP-3 (IC_{50} = 18.4 nM), MMP-7 (IC_{50} = 30 nM), and MMP-9 (IC_{50} = 2.7 nM).[2]

References

1. Nagase, H. and Woessner, J.F., Jr. Matrix metalloproteinases. *J. Biol. Chem.* **274(31)**, 21491-21494 (1999).
2. Pikul, S., McDow Dunham, K.L., Almstead, N.G., *et al.* Discovery of potent, achiral matrix metalloproteinase inhibitors. *J. Med. Chem.* **41(19)**, 3568-3571 (1998).

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