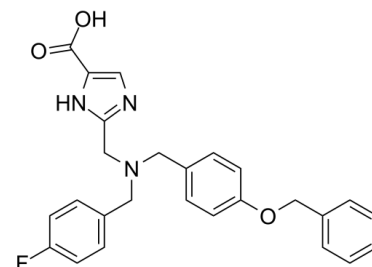


Data Sheet

Product Name:	MMPI-1154
Cat. No.:	CS-0068741
CAS No.:	1382722-47-5
Molecular Formula:	C ₂₆ H ₂₄ FN ₃ O ₃
Molecular Weight:	445.49
Target:	MMP
Pathway:	Metabolic Enzyme/Protease
Solubility:	DMSO : 83.33 mg/mL (187.05 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

MMPI-1154 is a promising novel cardio-cytoprotective imidazole-carboxylic acid (ICA) **MMP-2** inhibitor (**IC₅₀**=6.6 μM) and can be used for the study of acute myocardial infarction. MMPI-1154 also inhibits the activity of MMP-13, MMP-1 and MMP-9 with **IC₅₀**s of 1.8 μM, 10 μM, and 13 μM, respectively^[1]. **In Vitro:** MMPI-1154 (1-100 μM) inhibits MMP-2 enzyme isolated from rat heart in vitro, and 100% inhibition appears at the concentration 100 μM^[1].

MMPI-1154 (1 μM) shows significant cardio-cytoprotection, significantly decreases infarct size in an ex vivo model for acute myocardial infarction^[1].

References:

[1]. Péter Bencsik, et al. Development of Matrix Metalloproteinase-2 Inhibitors for Cardioprotection. *Front Pharmacol.* 2018 Apr 5;9:296.

CAIndexNames:

1H-Imidazole-5-carboxylic acid, 2-[[[(4-fluorophenyl)methyl]][[4-(phenylmethoxy)phenyl]methyl]amino]methyl]-

SMILES:

O=C(C1=CN=C(CN(CC2=CC=C(F)C=C2)CC3=CC=C(OCC4=CC=CC=C4)C=C3)N1)O

Caution: Product has not been fully validated for medical applications. For research use only.

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