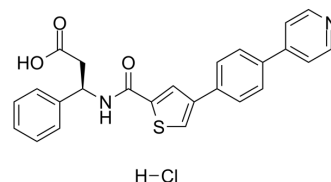


PF-00356231 hydrochloride

Cat. No.:	HY-114091
CAS No.:	820223-77-6
Molecular Formula:	C ₂₅ H ₂₁ ClN ₂ O ₃ S
Molecular Weight:	464.96
Target:	MMP
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 20.83 mg/mL (44.80 mM; ultrasonic and warming and heat to 60°C)
 H₂O : < 0.1 mg/mL (ultrasonic;warming;heat to 60°C) (insoluble)

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
		Concentration	1 mg	5 mg	10 mg
	1 mM		2.1507 mL	10.7536 mL	21.5072 mL
	5 mM		0.4301 mL	2.1507 mL	4.3014 mL
	10 mM		0.2151 mL	1.0754 mL	2.1507 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

PF-00356231 hydrochloride is a specific, non-peptidic, non-zinc chelating ligand and inhibitor of matrix metalloproteinase MMP-12 (IC₅₀=1.4 μM). PF-00356231 hydrochloride binds to MMP-12 and forms PF-00356231/MMP-12 complex. PF-00356231 hydrochloride shows potency against MMP-13, MMP-8, MMP-9, MMP-3 with IC₅₀s of 0.00065, 1.7, 0.98, 0.39 μM, respectively^[1].

IC₅₀ & Target

MMP-12	MMP13	MMP-3	MMP-8
1.4 μM (IC ₅₀)	0.65 nM (IC ₅₀)	0.39 μM (IC ₅₀)	1.7 μM (IC ₅₀)
MMP-9			
0.98 μM (IC ₅₀)			

In Vitro

PF-00356231 hydrochloride against MMP-12/13 can be affected significantly by the presence of acetohydroxamate (AH). PF-00356231 hydrochloride decreases the IC₅₀ values of MMP-12 (0.014 μM) and MMP-13 (0.27 μM) in the presence AH^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- J Immunol Res. 2022 Sep 16;2022:3012218.

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REFERENCES

[1]. Morales R, et al. Crystal structures of novel non-peptidic, non-zinc chelating inhibitors bound to MMP-12. J Mol Biol. 2004 Aug 20;341(4):1063-76.

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

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