Screening Libraries

Product Data Sheet

MMP2-IN-2

Cat. No.: HY-147745 CAS No.: 1772-39-0 Molecular Formula: $C_{13}H_{8}N_{4}O_{4}$ Molecular Weight: 284.23 MMP Target:

Pathway: Metabolic Enzyme/Protease Storage: 4°C, protect from light

* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

$$O \stackrel{\text{N}_{+}}{\longrightarrow} \bigvee_{\text{N}} \bigvee_{\text{N}} \bigvee_{\text{O}} O$$

SOLVENT & SOLUBILITY

In Vitro

DMSO: 7.14 mg/mL (25.12 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.5183 mL	17.5914 mL	35.1828 mL
	5 mM	0.7037 mL	3.5183 mL	7.0366 mL
	10 mM	0.3518 mL	1.7591 mL	3.5183 mL

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

BIOLOGICAL ACTIVITY

Description MMP2-IN-2 (compound 42) is a potent and selective MMP-2 (matrix metalloproteinases) inhibitor, with an IC₅₀ of 4.2 μM.

MMP2-IN-2 also shows inhibitory activity against MMP-13, MMP-9 and MMP-8, with IC₅₀ values of 12, 23.3, and 25 μM,

respectively^[1].

MMP-2 MMP-9 IC₅₀ & Target MMP13 MMP-8

> $12 \pm 7 \,\mu\text{M} \,(\text{IC}_{50})$ $23.3 \pm 10. \,\mu\text{M} \,(\text{IC}_{50})$ $25 \pm 10 \,\mu\text{M} \,(\text{IC}_{50})$ $4.2 \pm 0.2 \,\mu\text{M} \,(\text{IC}_{50})$

REFERENCES

[1]. Laghezza A, et al. Virtual screening identification and chemical optimization of substituted 2-arylbenzimidazoles as new non-zinc-binding MMP-2 inhibitors. Bioorg Med Chem. 2020 Feb 1;28(3):115257.

Page 1 of 2 www.MedChemExpress.com $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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Page 2 of 2 www.MedChemExpress.com