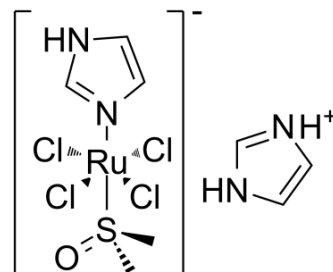


## NAMI-A

Cat. No.:	HY-19376		
CAS No.:	201653-76-1		
Molecular Formula:	C <sub>5</sub> H <sub>10</sub> Cl <sub>4</sub> N <sub>2</sub> ORuS · C <sub>3</sub> H <sub>4</sub> N <sub>2</sub> · H		
Molecular Weight:	458.18		
Target:	FAK		
Pathway:	Protein Tyrosine Kinase/RTK		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



## SOLVENT & SOLUBILITY

### In Vitro

H<sub>2</sub>O : 8.28 mg/mL (18.07 mM; Need ultrasonic and warming)

Preparing Stock Solutions	Solvent		1 mg	5 mg	10 mg
	Concentration	Mass			
	1 mM		2.1825 mL	10.9127 mL	21.8255 mL
	5 mM		0.4365 mL	2.1825 mL	4.3651 mL
	10 mM		0.2183 mL	1.0913 mL	2.1825 mL

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

## BIOLOGICAL ACTIVITY

### Description

NAMI-A is a ruthenium-based drug characterised by the selective activity against tumour metastases, inhibits the adhesion and migration. In vitro: NAMI-A can significantly affect tumor cells with metastatic ability. The half lifetime of NAMI-A elimination from the lungs is longer than for liver, kidney, and primary tumor. NAMI-A bound to collagen is active on tumor cells as shown in vitro by an invasion test, using a modified Boyden chamber and Matrigel, and it inhibits the matrix metallo-proteinases MMP-2 and MMP-9 at micromolar concentrations. [1] The ruthenium drug NAMI-A inhibits the adhesion and migration of colorectal cancer cells. NAMI-A decreases α5β1 integrin expression and FAK auto-phosphorylation on Tyr 397. [2] In vivo: The reference for NAMI-A is 35 mg/kg/day. [1]

## REFERENCES

[1]. Sava G et al. Dual Action of NAMI-A in inhibition of solid tumor metastasis: selective targeting of metastatic cells and binding to collagen. Clin Cancer Res. 2003 May;9(5):1898-905.

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[2]. Pelillo C et al. Inhibition of adhesion, migration and of  $\alpha 5\beta 1$  integrin in the HCT-116 colorectal cancer cells treated with the ruthenium drug NAMI-A. J Inorg Biochem. 2016 Jul;160:225-35.

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

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