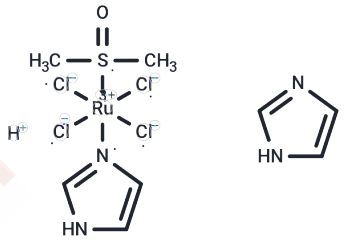
# Data Sheet (Cat.No.T16266)

NAMI-A

## Chemical Properties



| | |
|---|---|
| CAS No. : | 201653-76-1 |
| Formula: | C8H15Cl4N4ORuS |
| Molecular Weight: | 458.18 |
| Appearance: | no data available |
| Storage: | Powder: -20°C for 3 years \| In solvent: -80°C for 1 year |

## Biological Description

| | |
|---|---|
| Description | NAMI-A, a ruthenium-based compound, selectively targets tumor metastasis by inhibiting cancer cell adhesion and migration. |
| Targets(IC50) | FAK |
| In vitro | NAMI-A can significantly affect tumor cells with metastatic ability. The half-life of NAMI-A elimination from the lungs is longer than for the 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]<br>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] |

## Solubility Information

| | |
|---|---|
| Solubility | H2O: 8.28 mg/mL (18.07 mM),Sonication and heating are recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 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 |
| 50 mM | 0.0437 mL | 0.2183 mL | 0.4365 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

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.
Pelillo C et al. Inhibition of adhesion, migration and of α5β1 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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