



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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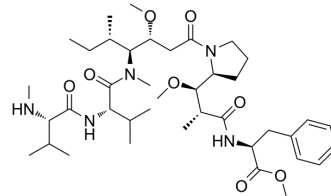
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## MMAF-OMe

<b>Cat. No.:</b>	HY-79256
<b>CAS No.:</b>	863971-12-4
<b>Molecular Formula:</b>	C <sub>40</sub> H <sub>67</sub> N <sub>5</sub> O <sub>8</sub>
<b>Molecular Weight:</b>	745.99
<b>Target:</b>	ADC Cytotoxin
<b>Pathway:</b>	Antibody-drug Conjugate/ADC Related
<b>Storage:</b>	Powder    -20°C    3 years 4°C        2 years



\* The compound is unstable in solutions, freshly prepared is recommended.

### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : ≥ 100 mg/mL (134.05 mM)  
\* "≥" means soluble, but saturation unknown.

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.3405 mL	6.7025 mL	13.4050 mL
	5 mM	0.2681 mL	1.3405 mL	2.6810 mL
	10 mM	0.1341 mL	0.6703 mL	1.3405 mL

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.5 mg/mL (3.35 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (3.35 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (3.35 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

MMAF-Ome, an antitubulin agent, is also an ADC cytotoxin. MMAF-Ome inhibits several tumor cell lines with IC<sub>50</sub>s of 0.056 nM, 0.166 nM, 0.183 nM, and 0.449 nM for MDAMB435/5T4, MDAMB361DYT2, MDAMB468, and Raji (5T4<sup>+</sup>) cell lines, respectively.

#### IC<sub>50</sub> & Target

Auristatin

#### In Vitro

2.5F-Fc and 2.5F-Fc-MMAF have similar IC<sub>50</sub> values (6.9±1.1 vs. 8.3±1.3 nM, respectively), indicating that MMAF conjugation

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has negligible impact on integrin-binding affinity<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## PROTOCOL

### Cell Assay <sup>[1]</sup>

Cells are seeded in a 96-well plate at a density of 2,000 cells per well and grown overnight at 37°C, 5% CO<sub>2</sub> in the media described for each cell line above. Cells are subsequently treated with 100 µL of fresh media, containing varying concentrations of knottin-Fc fusion proteins or linker-modified MMAF, and incubated for 5 days at 37°C, 5% CO<sub>2</sub>. Cell proliferation is measured using the Cell Counting Kit-8 (CCK-8), by adding the water-soluble tetrazolium salt, WST-8, to each well in an amount equal to 10% of the culture volume. After incubation for 1 hour at 37°C, absorbance at 450 nm is measured with a Synergy H4 microtiter plate reader. Cell proliferation is expressed as a percentage of absorbance relative to the control of untreated cells. Percent maximum proliferation is then reported as  $(\text{sample} - \text{background}) / (\text{control} - \text{background}) \times 100$ . Error bars represent the SD of experiments performed in triplicate.

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## CUSTOMER VALIDATION

- Chemrxiv. 2020 Nov.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Currier NV, et al. Targeted Drug Delivery with an Integrin-Binding Knottin-Fc-MMAF Conjugate Produced by Cell-Free Protein Synthesis. Mol Cancer Ther. 2016 Jun;15(6):1291-300

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

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