



# 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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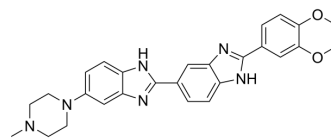
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## DMA

Cat. No.:	HY-15621
CAS No.:	188860-26-6
Molecular Formula:	C <sub>27</sub> H <sub>28</sub> N <sub>6</sub> O <sub>2</sub>
Molecular Weight:	468.55
Target:	Fluorescent Dye
Pathway:	Others
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



## SOLVENT & SOLUBILITY

### In Vitro

DMSO : ≥ 54 mg/mL (115.25 mM)

\* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
		1 mM	2.1342 mL	10.6712 mL	21.3424 mL
	5 mM	0.4268 mL	2.1342 mL	4.2685 mL	
	10 mM	0.2134 mL	1.0671 mL	2.1342 mL	

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

## BIOLOGICAL ACTIVITY

### Description

DMA is a fluorescent compound ( $\lambda_{ex}$ =340 nm,  $\lambda_{em}$ =478 nm).

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

IC<sub>50</sub>: 3.4  $\mu$ M (HeLa cell), 5.3  $\mu$ M (MCF7 cell)<sup>[1]</sup>

### In Vitro

The newly synthesized bisbenzimidazole derivatives DMA (6c) is evaluated for their cytotoxicity against human tumor cell lines, which are cervix carcinoma cell line (HeLa), breast carcinoma cell line (MCF7) and brain glioma cell line (U87) in comparison to Hoechst. In case of MCF7, the IC<sub>50</sub> is observed at 5.3  $\mu$ M for DMA. The IC<sub>50</sub> determined in the case of HeLa is 3.4  $\mu$ M for DMA<sup>[1]</sup>.

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

## PROTOCOL

### Cell Assay

Various human tumor cells (U87, HeLa and MCF7) are maintained as monolayer at 37°C in 5% CO<sub>2</sub> using DMEM medium. Approximately 3000-8000 cells/well are seeded in 96-well plates containing 200  $\mu$ L of medium and incubated for 24 h. The

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culture medium is replaced by fresh medium containing 1, 10, 50, 100  $\mu\text{M}$  of DMA (6c) and incubated for 24, 48 and 72 h. The cell viability is determined by the MTT assay. The light absorbance is measured using a microplate reader<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

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[1]. Singh M, et al. Synthesis and biological activity of novel inhibitors of topoisomerase I: 2-aryl-substituted 2-bis-1H-benzimidazoles. Eur J Med Chem. 2011 Feb;46(2):659-69.

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

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