



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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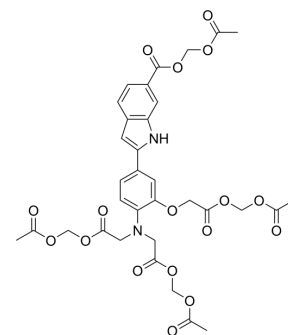
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## Mag-indo-1/AM

<b>Cat. No.:</b>	HY-D1700
<b>CAS No.:</b>	130926-94-2
<b>Molecular Formula:</b>	C <sub>33</sub> H <sub>34</sub> N <sub>2</sub> O <sub>17</sub>
<b>Molecular Weight:</b>	730.63
<b>Target:</b>	Fluorescent Dye
<b>Pathway:</b>	Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Mag-indo-1/AM is a cell-permeable fluorescent indicator for Mg <sup>2+</sup> and also for Ca <sup>2+</sup> (Ex=340-390 nm, Em=410-490 nm). Mag-indo-1/AM can be used to determine intracellular Mg <sup>2+</sup> and Ca <sup>2+</sup> concentrations <sup>[1][2]</sup> .
<b>In Vitro</b>	<p>Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs).</p> <p>Measurement of intracellular Ca<sup>2+</sup><sup>[1]</sup>:</p> <ol style="list-style-type: none"> <li>1. Incubate 3 mL cell suspension with 10 μM Mag-indo-1/AM for 15 min at 30°C.</li> <li>2. Centrifuge the cells for 1 min at 500 rpm and resuspend in 5 mL isolation buffer (containing 1 mM CaCl<sub>2</sub>).</li> <li>3. Add 1 mM probenecid to the cell suspension to prevent dye leakage from the cytosol and store the cells (Mag-indo-1/AM-loaded cells) at room temperature until use.</li> <li>4. Incubate the Mag-indo-1/AM-loaded cells at room temperature for 2 h, shake gently at 37°C for 1.5 h, centrifuge the pellet, resuspend and store at room temperature.</li> <li>6. Place a small portion of the loaded cells in an experimental chamber which is mounted on the stage of an inverted microscope.</li> <li>7. Measure fluorescence of Mag-indo-1/AM (Ex=340-390 nm, Em=410 and 490 nm (the peak emissions of the Ca<sup>2+</sup> bound and Ca<sup>2+</sup> free forms of the indicator)). Fluorescence of the whole cell is collected on line by a photon counting system.</li> </ol> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### REFERENCES

[1]. Griffiths EJ. Calcium handling and cell contraction in rat cardiomyocytes depleted of intracellular magnesium. *Cardiovasc Res.* 2000 Jul;47(1):116-23.

[2]. Morelle B, et al. Measurement of intracellular magnesium concentration in 3T3 fibroblasts with the fluorescent indicator Mag-indo-1. *Anal Biochem.* 1994 Apr;218(1):170-6.

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

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