



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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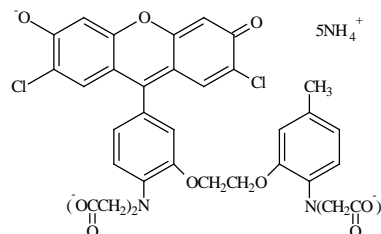
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## PRODUCT AND SAFETY DATA SHEET

**PRODUCT NAME:** FLUO-3, Pentaammonium Salt**CATALOGUE #:** 50010**MOLECULAR INFORMATION:** C<sub>36</sub>H<sub>45</sub>Cl<sub>2</sub>N<sub>7</sub>O<sub>13</sub>  
MWt: 854.7  
[134907-84-9]**PROPERTIES:**

<b>Color &amp; Form</b>	Orange red solid
<b>Purity</b>	≥ 95% by TLC
<b>Solubility</b>	Soluble in DMSO or water (pH>6)
$\lambda_{ex} \backslash \lambda_{em}$	506nm/526nm (low or high [Ca <sup>2+</sup> ])
<b>Dissociation (K<sub>d</sub>)</b>	450 nM
<b>Extinction Coefficient (ε)</b>	80,000 M <sup>-1</sup> cm <sup>-1</sup> (506 nm)

**STORAGE AND HANDLING:**

Store desiccated at 4 °C upon receipt. Protect from light, especially in solution.

**APPLICATION:**

Fluo-3 has its absorption maximum at 506 nm, thus making it excitable by the argon-ion laser. Unlike fura-2 and indo-1, neither the excitation nor the emission maximum of the sensor shifts significantly before and after Ca<sup>2+</sup> binding. As a result, the ratioing technique is not applicable to fluo-3. Fluo-3 is essentially nonfluorescent without Ca<sup>2+</sup> present, but the fluorescence increases at least 40 times on Ca<sup>2+</sup> binding. Also, because fluo-3 binds Ca<sup>2+</sup> more weakly (higher K<sub>d</sub>) than do fura-2 and indo-1, it is more useful for measuring high transient Ca<sup>2+</sup> concentration during Ca<sup>2+</sup> spikes.

Fluo-3 Pentaammonium Salt is membrane-impermeant but can be loaded into cells via microinjection or scrape loading.

Ref: 1) Zucker, R.S., et al. *Cell Calcium*. **13**, 29(1992); 2) Merritt, J.E., et al. *Biochem. J.* **269**, 513(1990); 3) Lattanzio, F.A., et al. *Biochem. Biophys. Res. Comm.* **171**, 102(1990); 4) Jaffe, L. et al. *Proc. Natl. Acad. Sci. USA* **88**, 9883(1991). 5) Minta, A., et al. *J. Biol. Chem.* **264**, 8171(1989); 6) Kao, J.P.Y., et al. *J. Biol. Chem.* **264**, 8179(1989)

**TOXICITY:** Unknown

<b>FIRST AID:</b>	Potentially harmful. Avoid prolonged or repeated exposure. Avoid getting in eyes, on skin, or on clothing. Wash thoroughly after handling. If eye or skin contact occurs, wash affected areas with plenty of water for 15 minutes and seek medical advice. In case of inhaling or swallowing, move individual to fresh air and seek medical advice immediately.
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