



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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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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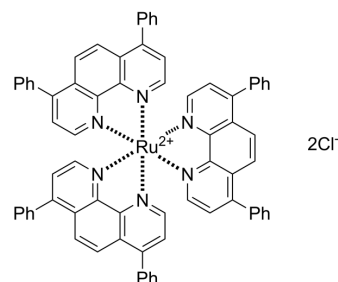
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## Tris(4,7-diphenyl-1,10-phenanthroline)ruthenium(II) dichloride

|                           |  |
|---------------------------|--|
| <b>Cat. No.:</b>          | HY-W074143   |
| <b>CAS No.:</b>           | 36309-88-3   |
| <b>Molecular Formula:</b> | C <sub>72</sub> H <sub>48</sub> Cl <sub>2</sub> N <sub>6</sub> Ru  |
| <b>Molecular Weight:</b>  | 1169.17  |
| <b>Target:</b>            | Fluorescent Dye  |
| <b>Pathway:</b>           | Others   |
| <b>Storage:</b>           | 4°C, protect from light, stored under nitrogen<br>* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen) |



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 25 mg/mL (21.38 mM; Need ultrasonic)  
Ethanol : 8.33 mg/mL (7.12 mM; ultrasonic and warming and heat to 60°C)

| Preparing Stock Solutions | Solvent Concentration | Mass      |           |           |
|---------------------------|-----------------------|-----------|-----------|-----------|
|                           |                       | 1 mg      | 5 mg      | 10 mg     |
|                           | 1 mM                  | 0.8553 mL | 4.2765 mL | 8.5531 mL |
|                           | 5 mM                  | 0.1711 mL | 0.8553 mL | 1.7106 mL |
|                           | 10 mM                 | 0.0855 mL | 0.4277 mL | 0.8553 mL |

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: 1.25 mg/mL (1.07 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% EtOH >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 0.83 mg/mL (0.71 mM); Clear solution
- Add each solvent one by one: 10% EtOH >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 0.83 mg/mL (0.71 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Tris(4,7-diphenyl-1,10-phenanthroline)ruthenium(II) dichloride is an oxygen-sensitive fluorescent indicator widely used as a probe for luminescence detection and quantitative oxygen determination<sup>[1]</sup>.

### REFERENCES

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[1]. Hao Xu, et al. A real-time ratiometric method for the determination of molecular oxygen inside living cells using sol-gel-based spherical optical nanosensors with applications to rat C6 glioma. Anal Chem. 2001 Sep 1;73(17):4124-33.

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

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