



# 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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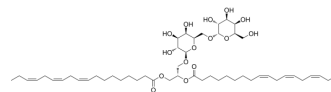
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## DGDG

<b>Cat. No.:</b>	HY-143693		
<b>CAS No.:</b>	63142-69-8		
<b>Molecular Formula:</b>	C <sub>51</sub> H <sub>84</sub> O <sub>15</sub>		
<b>Molecular Weight:</b>	937.2		
<b>Target:</b>	Liposome		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Pure form	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



## SOLVENT & SOLUBILITY

### In Vitro

DMSO : 100 mg/mL (106.70 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	1.0670 mL	5.3350 mL	10.6701 mL
5 mM	0.2134 mL	1.0670 mL	2.1340 mL
10 mM	0.1067 mL	0.5335 mL	1.0670 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 (2.67 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: 2.5 mg/mL (2.67 mM); Suspended solution; Need ultrasonic

## BIOLOGICAL ACTIVITY

### Description

DGDG, a chloroplast lipid, is a bilayer-forming lipid. DGDG is important for photosynthesis, and can be used for drug delivery [1].

### In Vitro

Apart from facilitating the photosynthesis light reaction in the thylakoid membrane, DGDG is important for maintaining chloroplast morphology and for plant survival under abiotic stresses such as phosphate starvation and freezing. During phosphate limitation, the amounts of DGDG increase in the plastids of plants, and DGDG is exported to extraplastidial membranes to replace phospholipids[1].

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

## REFERENCES

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[1]. Hsou-Min Li, et al. Chloroplast Galactolipids: The Link Between Photosynthesis, Chloroplast Shape, Jasmonates, Phosphate Starvation and Freezing Tolerance. Plant Cell Physiol. 2018 Jun 1;59(6):1128-1134.

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

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