



# 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 Handels GmbH

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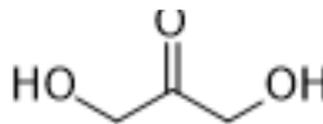
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## 1,3-Dihydroxyacetone

Cat. No.:	HY-Y0335		
CAS No.:	96-26-4		
Molecular Formula:	C <sub>3</sub> H <sub>6</sub> O <sub>3</sub>		
Molecular Weight:	90.08		
Target:	Endogenous Metabolite		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (1110.12 mM; Need ultrasonic)																															
	<table border="1"> <tr> <th colspan="2"></th> <th colspan="3">Mass</th> </tr> <tr> <th colspan="2"></th> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> <tr> <th rowspan="4">Preparing Stock Solutions</th> <th>Solvent Concentration</th> <td></td> <td></td> <td></td> </tr> <tr> <th>1 mM</th> <td>11.1012 mL</td> <td>55.5062 mL</td> <td>111.0124 mL</td> </tr> <tr> <th>5 mM</th> <td>2.2202 mL</td> <td>11.1012 mL</td> <td>22.2025 mL</td> </tr> <tr> <th>10 mM</th> <td>1.1101 mL</td> <td>5.5506 mL</td> <td>11.1012 mL</td> </tr> </table>							Mass					1 mg	5 mg	10 mg	Preparing Stock Solutions	Solvent Concentration				1 mM	11.1012 mL	55.5062 mL	111.0124 mL	5 mM	2.2202 mL	11.1012 mL	22.2025 mL	10 mM	1.1101 mL	5.5506 mL	11.1012 mL
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Please refer to the solubility information to select the appropriate solvent.																																
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (27.75 mM); Clear solution																															
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (27.75 mM); Clear solution																															
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (27.75 mM); Clear solution																															

### BIOLOGICAL ACTIVITY

Description	1,3-Dihydroxyacetone (DHA), the main active ingredient in sunless tanning skin-care preparations and an important precursor for the synthesis of various fine chemicals, is produced on an industrial scale by microbial fermentation of glycerol (HY-B1659) in <i>Gluconobacter oxydans</i> . 1,3-Dihydroxyacetone is also used for synthesis of new biodegradable polymers by combining with lactic acid (HY-B2227) <sup>[1][2]</sup> .
IC <sub>50</sub> & Target	Microbial Metabolite

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## REFERENCES

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[1]. Dikshit PK, et al. Optimization of 1,3-dihydroxyacetone production from crude glycerol by immobilized *Gluconobacter oxydans* MTCC 904. *Bioresour Technol.* 2016 Sep;216:1058-65.

[2]. Zheng Z, et al. Novel Process for 1,3-Dihydroxyacetone Production from Glycerol. 1. Technological Feasibility Study and Process Design. *Ind. Eng. Chem. Res.* 2012, 51, 9, 3715–3721.

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

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