



# 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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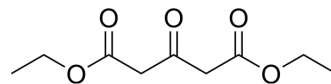
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## Diethyl 3-oxopentanedioate

Cat. No.:	HY-W014799		
CAS No.:	105-50-0		
Molecular Formula:	C <sub>9</sub> H <sub>14</sub> O <sub>5</sub>		
Molecular Weight:	202.21		
Target:	Biochemical Assay Reagents		
Pathway:	Others		
Storage:	Pure form	-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 (494.54 mM)  
 \* "≥" means soluble, but saturation unknown.

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	4.9454 mL	24.7268 mL	49.4535 mL
	5 mM	0.9891 mL	4.9454 mL	9.8907 mL
	10 mM	0.4945 mL	2.4727 mL	4.9454 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 (12.36 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
 Solubility: ≥ 2.5 mg/mL (12.36 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
 Solubility: ≥ 2.5 mg/mL (12.36 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Diethyl 3-oxopentanedioate is a biochemical reagent that can be used as a biological material or organic compound for life science related research.

#### In Vitro

Synthesis of 1-substituted 4-ethoxycarbonyl-5-(ethoxycarbonylmethyl) pyrazoles Diethyl acetone-1, 3-dicarboxylate reacts with N, N-dimethylformamide dimethyl acetal (DMFDMA) in ethanol at room temperature. Unexpected product dichotomy is produced in the Biginelli-like condensation of 2-hydroxybenzaldehyde with urea or thiourea and dimethyl or diethyl

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acetone-1,3-dicarboxylate, respectively, as active methylene components. Ethyl 2-amino-4-(2-ethoxy-2-oxoethyl)thiazole-5-carboxylate (2a), prepared from diethylacetone-1,3-dicarboxylate, sulfuryl chloride and thiourea. Synthesis of diethyl 2,2-diethyl-3,5-dioxopimelate by the reaction of ethyl 3-chloro-3-oxo-2,2-dimethylpropionate with diethyl acetone-1,3-dicarboxylate.

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

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

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