



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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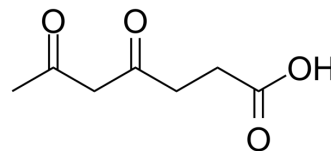
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## 4,6-Dioxoheptanoic acid

<b>Cat. No.:</b>	HY-W010184		
<b>CAS No.:</b>	51568-18-4		
<b>Molecular Formula:</b>	C <sub>7</sub> H <sub>10</sub> O <sub>4</sub>		
<b>Molecular Weight:</b>	158.15		
<b>Target:</b>	Endogenous Metabolite		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 100 mg/mL (632.31 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	6.3231 mL	31.6156 mL	63.2311 mL
		5 mM	1.2646 mL	6.3231 mL	12.6462 mL
10 mM		0.6323 mL	3.1616 mL	6.3231 mL	
Please refer to the solubility information to select the appropriate solvent.					
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.5 mg/mL (15.81 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (15.81 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (15.81 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

<b>Description</b>	4,6-Dioxoheptanoic acid is a potent inhibitor of heme biosynthesis.
<b>IC<sub>50</sub> &amp; Target</b>	Human Endogenous Metabolite
<b>In Vitro</b>	4,6-Dioxoheptanoic acid (Succinylacetone, SA) is examined with regard to its ability to a) inhibit the second enzyme of the heme pathway, δ-aminolevulinic acid (ALA) dehydratase, b) lower the heme concentration, and c) inhibit cell growth of murine erythroleukemia (MEL) cells in culture <sup>[1]</sup> .

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

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## CUSTOMER VALIDATION

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- Genome Biol. 2022 Dec 15;23(1):259.
- Pharmacol Res. 2021 Jun 1;105701.
- The Saudi Journal of Gastroenterology. 2020 Apr.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

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[1]. Ebert PS, et al. Succinylacetone, a potent inhibitor of heme biosynthesis: effect on cell growth, heme content and delta-aminolevulinic acid dehydratase activity of malignant murine erythroleukemia cells. Biochem Biophys Res Commun. 1979 Jun 27;88(4):1382-

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

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