



# 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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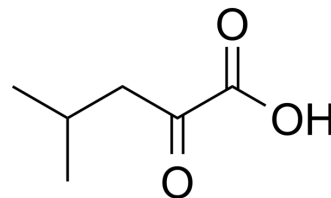
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## 4-Methyl-2-oxopentanoic acid

Cat. No.:	HY-W012722
CAS No.:	816-66-0
Molecular Formula:	C <sub>6</sub> H <sub>10</sub> O <sub>3</sub>
Molecular Weight:	130.14
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (768.40 mM; Need ultrasonic)  
H<sub>2</sub>O : 100 mg/mL (768.40 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	7.6840 mL	38.4202 mL	76.8403 mL
	5 mM	1.5368 mL	7.6840 mL	15.3681 mL
	10 mM	0.7684 mL	3.8420 mL	7.6840 mL

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

#### In Vivo

- Add each solvent one by one: PBS  
Solubility: 100 mg/mL (768.40 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.5 mg/mL (19.21 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (19.21 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (19.21 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

4-Methyl-2-oxopentanoic acid (α-Ketoisocaproic acid), an abnormal metabolite, is both a neurotoxin and a metabotoxin.

#### IC<sub>50</sub> & Target

Human Endogenous Metabolite

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## CUSTOMER VALIDATION

- Nat Commun. 2022 May 25;13(1):2904.

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

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## REFERENCES

[1]. Yudkoff M, et al. Brain amino acid requirements and toxicity: the example of leucine. J Nutr. 2005 Jun;135(6 Suppl):1531S-8S.

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

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