



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

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

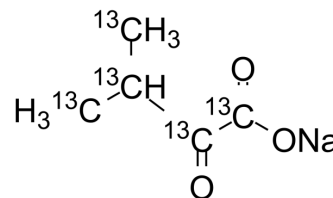
mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Sodium 3-methyl-2-oxobutanoate-¹³C₅

| | | | |
|---------------------------|--|-------|----------|
| Cat. No.: | HY-W006057AS16 | | |
| CAS No.: | 1173018-24-0 | | |
| Molecular Formula: | ¹³ C ₅ H ₇ NaO ₃ | | |
| Molecular Weight: | 143.06 | | |
| 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

H₂O : ≥ 100 mg/mL (699.01 mM)
 * "≥" means soluble, but saturation unknown.

| Preparing Stock Solutions | Solvent | | 1 mg | 5 mg | 10 mg |
|---------------------------|---------------|------|-----------|------------|------------|
| | Concentration | Mass | | | |
| | 1 mM | | 6.9901 mL | 34.9504 mL | 69.9007 mL |
| | 5 mM | | 1.3980 mL | 6.9901 mL | 13.9801 mL |
| | 10 mM | | 0.6990 mL | 3.4950 mL | 6.9901 mL |

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

BIOLOGICAL ACTIVITY

Description

Sodium 3-methyl-2-oxobutanoate-¹³C₅ is the ¹³C labeled Sodium 3-methyl-2-oxobutanoate[1]. Sodium 3-methyl-2-oxobutanoate is a precursor of pantothenic acid in Escherichia coli[2][3][4].

In Vitro

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019 Feb;53(2):211-216.
 [2]. MAAS WK, et al. alpha-Ketoisovaleric acid, a precursor of pantothenic acid in Escherichia coli. *J Bacteriol*. 1953 Apr;65(4):388-93.

[3]. Schauder P, et al. Oral administration of alpha-ketoisovaleric acid or valine in humans: blood kinetics and biochemical effects. J Lab Clin Med. 1984 Apr;103(4):597-605.

[4]. Coitinho AS, et al. Pharmacological evidence that alpha-ketoisovaleric acid induces convulsions through GABAergic and glutamatergic mechanisms in rats. Brain Res. 2001 Mar;989(1):68-73.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA