



# SZABO SCANDIC

Part of Europa Biosite

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### Zuschläge

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- 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

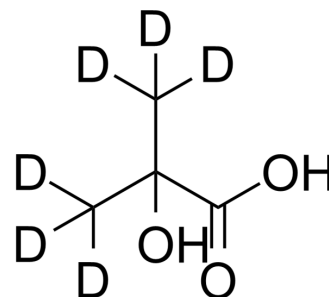
[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

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

## 2-Hydroxyisobutyric acid-d<sub>6</sub>

|                           |                                                                                                                                |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <b>Cat. No.:</b>          | HY-W015924S                                                                                                                    |
| <b>CAS No.:</b>           | 40662-45-1                                                                                                                     |
| <b>Molecular Formula:</b> | C <sub>4</sub> H <sub>2</sub> D <sub>6</sub> O <sub>3</sub>                                                                    |
| <b>Molecular Weight:</b>  | 110.14                                                                                                                         |
| <b>Target:</b>            | Endogenous Metabolite                                                                                                          |
| <b>Pathway:</b>           | Metabolic Enzyme/Protease                                                                                                      |
| <b>Storage:</b>           | 4°C, sealed storage, away from moisture<br>* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture) |



### SOLVENT & SOLUBILITY

|                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |              |            |            |
|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------|------------|------------|
| <b>In Vitro</b>                                                               | DMSO : 100 mg/mL (907.94 mM; Need ultrasonic)                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |              |            |            |
|                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Solvent<br>Concentration | Mass<br>1 mg | 5 mg       | 10 mg      |
|                                                                               | <b>Preparing Stock Solutions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1 mM                     | 9.0794 mL    | 45.3968 mL | 90.7935 mL |
|                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 5 mM                     | 1.8159 mL    | 9.0794 mL  | 18.1587 mL |
|                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 10 mM                    | 0.9079 mL    | 4.5397 mL  | 9.0794 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<br/>Solubility: ≥ 2.5 mg/mL (22.70 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline)<br/>Solubility: ≥ 2.5 mg/mL (22.70 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil<br/>Solubility: ≥ 2.5 mg/mL (22.70 mM); Clear solution</li> </ol> |                          |              |            |            |

### BIOLOGICAL ACTIVITY

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b> | 2-Hydroxyisobutyric acid-d <sub>6</sub> is the deuterium labeled 2-Hydroxyisobutyric acid. 2-Hydroxyisobutyric acid is an endogenous metabolite.                                                                                                                                                                                                                                                                               |
| <b>In Vitro</b>    | 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 <sup>[1]</sup> .<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

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## REFERENCES

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[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

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**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](mailto:tech@MedChemExpress.com)

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