



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
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### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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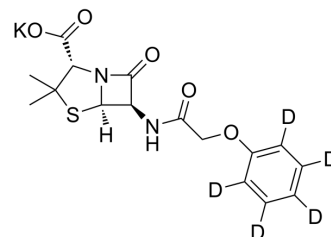
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## Penicillin V-d<sub>5</sub> potassium

|                    |                                                                                                                                |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Cat. No.:          | HY-B0975S1                                                                                                                     |
| CAS No.:           | 2699607-22-0                                                                                                                   |
| Molecular Formula: | C <sub>16</sub> H <sub>12</sub> D <sub>5</sub> KN <sub>2</sub> O <sub>5</sub> S                                                |
| Molecular Weight:  | 393.51                                                                                                                         |
| Target:            | Bacterial; Antibiotic                                                                                                          |
| Pathway:           | Anti-infection                                                                                                                 |
| Storage:           | 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

#### In Vitro

DMSO : 12 mg/mL (30.49 mM; Need ultrasonic and warming)

|                              | Solvent<br>Concentration | Mass | 1 mg      | 5 mg       | 10 mg      |
|------------------------------|--------------------------|------|-----------|------------|------------|
|                              |                          |      |           |            |            |
| Preparing<br>Stock Solutions | 1 mM                     |      | 2.5412 mL | 12.7062 mL | 25.4123 mL |
|                              | 5 mM                     |      | 0.5082 mL | 2.5412 mL  | 5.0825 mL  |
|                              | 10 mM                    |      | 0.2541 mL | 1.2706 mL  | 2.5412 mL  |

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

### BIOLOGICAL ACTIVITY

#### Description

Penicillin V-d<sub>5</sub> (potassium) is the deuterium labeled Penicillin V Potassium[1]. Penicillin V Potassium (Phenoxymethylpenicillin potassium salt) is an orally active antibiotic. Penicillin V Potassium inhibits the growth of Streptococci, C. difficile and S. aureus. Penicillin V Potassium can be used for the research of otitis, sinusitis, pharyngitis and tonsillitis[2][3][4][5].

#### 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<sup>[1]</sup>.  
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]. Sabath LD. Et, al. Phenoxymethylpenicillin (penicillin V) and phenethicillin. Med Clin North Am. 1970 Sep;54(5):1101-11.

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- [3]. Kamme C, et, al. In vitro effect on group A streptococci of loracarbef versus cefadroxil, cefaclor and penicillin V. Scand J Infect Dis. 1993;25(1):37-42.
- [4]. Norén T, et, al. In vitro susceptibility to 17 antimicrobials of clinical Clostridium difficile isolates collected in 1993-2007 in Sweden. Clin Microbiol Infect. 2010 Aug;16(8):1104-10.
- [5]. Overbosch D, et, al. Comparative pharmacodynamics and clinical pharmacokinetics of phenoxymethylpenicillin and pheneticillin. Br J Clin Pharmacol. 1985 May;19(5):657-68.
- [6]. Hermansson A, et, al. Prevention of experimental acute otitis media with penicillin V. Acta Otolaryngol. Jan-Feb 1990;109(1-2):119-23.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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