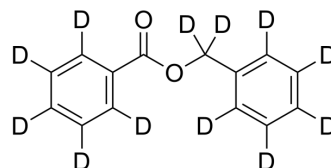


## Benzyl benzoate-d<sub>12</sub>

<b>Cat. No.:</b>	HY-B0935S1		
<b>CAS No.:</b>	352431-26-6		
<b>Molecular Formula:</b>	C <sub>14</sub> D <sub>12</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	224.32		
<b>Target:</b>	Parasite; Endogenous Metabolite		
<b>Pathway:</b>	Anti-infection; Metabolic Enzyme/Protease		
<b>Storage:</b>	Pure form	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (445.79 mM; Need ultrasonic)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	4.4579 mL	22.2896 mL	44.5792 mL
	5 mM	0.8916 mL	4.4579 mL	8.9158 mL
	10 mM	0.4458 mL	2.2290 mL	4.4579 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Benzyl benzoate-d<sub>12</sub> is the deuterium labeled Benzyl benzoate[1]. Benzyl benzoate (Benzoic acid benzyl ester) is a fragrance ingredient in cosmetic products. Benzyl benzoate can be used for the research of Scabies and Demodex-associated inflammatory skin conditions[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<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]. Johnson W, et, al. Safety Assessment of Benzyl Alcohol, Benzoic Acid and its Salts, and Benzyl Benzoate. *Int J Toxicol*. Nov/Dec 2017;36(3\_suppl):5S-30S.

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[3]. Jacob S, et, al. Treatment of Demodex-associated inflammatory skin conditions: A systematic review. Dermatol Ther. 2019 Nov32(6):e13103.

[4]. Dressler C, et, al. The Treatment of Scabies. Dtsch Arztebl Int. 2016 Nov 14113(45):757-762.

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

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