



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



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Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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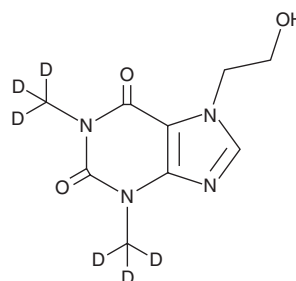
# PRODUCT INFORMATION



## 7-(β-Hydroxyethyl)theophylline-d<sub>6</sub>

Item No. 35133

<b>Formal Name:</b>	7-(2-hydroxyethyl)-1,3-bis(methyl-d <sub>3</sub> )-3,7-dihydro-1H-purine-2,6-dione
<b>Synonyms:</b>	Etophylline-d <sub>6</sub> , Hydroxyethyltheophylline-d <sub>6</sub>
<b>MF:</b>	C <sub>9</sub> H <sub>6</sub> D <sub>6</sub> N <sub>4</sub> O <sub>3</sub>
<b>FW:</b>	230.3
<b>Chemical Purity:</b>	≥90% (7-(β-hydroxyethyl)theophylline)
<b>Deuterium Incorporation:</b>	≥99% deuterated forms (d <sub>1</sub> -d <sub>6</sub> ); ≤1% d <sub>0</sub>
<b>Supplied as:</b>	A solid
<b>Storage:</b>	-20°C
<b>Stability:</b>	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

7-(β-Hydroxyethyl)theophylline-d<sub>6</sub> is intended for use as an internal standard for the quantification of 7-(β-hydroxyethyl)theophylline (Item No. 28372) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

7-(β-Hydroxyethyl)theophylline-d<sub>6</sub> is supplied as a solid. A stock solution may be made by dissolving the 7-(β-hydroxyethyl)theophylline-d<sub>6</sub> in the solvent of choice, which should be purged with an inert gas. 7-(β-Hydroxyethyl)theophylline-d<sub>6</sub> is soluble in chloroform and methanol.

### Description

7-(β-Hydroxyethyl)theophylline is a methylxanthine phosphodiesterase (PDE) inhibitor.<sup>1</sup> It reduces histamine, 5-hydroxytryptamine (5-HT), and bradykinin-induced bronchoconstriction in an anesthetized guinea pig model of bronchial asthma.<sup>2</sup> Formulations containing 7-(β-hydroxyethyl)theophylline in combination with theophylline have been used in the treatment of asthma.

### References

1. Mizon, J., Skandrani, E., and Mizon, C. Determination of the inhibitory activity of some new substituted theophyllines on the specific phosphodiesterase of cyclic nucleotides. *Therapie* **26(5)**, 911-917 (1971).
2. Ufkes, J.G., Leeuwijn, R.S., Ottenhof, M., *et al.* Efficacy of theophylline and its N-7-substituted derivatives in experimentally induced bronchial asthma in the guinea-pig. *Arch. Int. Pharmacodyn. Ther.* **253(2)**, 301-314 (1981).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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