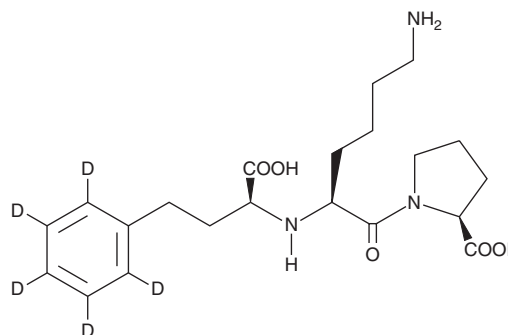


# PRODUCT INFORMATION



## Lisinopril-d<sub>5</sub> Item No. 28520

**CAS Registry No.:** 1356905-39-9  
**Formal Name:** ((S)-1-carboxy-3-(phenyl-d<sub>5</sub>)propyl)-L-lysyl-L-proline  
**MF:** C<sub>21</sub>H<sub>26</sub>D<sub>5</sub>N<sub>3</sub>O<sub>5</sub>  
**FW:** 410.5  
**Chemical Purity:** ≥95% (Lisinopril)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>5</sub>); ≤1% d<sub>0</sub>  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

Lisinopril-d<sub>5</sub> is intended for use as an internal standard for the quantification of lisinopril (Item No. 16833) 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).

Lisinopril-d<sub>5</sub> is supplied as a solid. A stock solution may be made by dissolving the lisinopril-d<sub>5</sub> in the solvent of choice, which should be purged with an inert gas. Lisinopril-d<sub>5</sub> is soluble in methanol.

### Description

Lisinopril is an angiotensin-converting enzyme (ACE) inhibitor (IC<sub>50</sub> = 1.2 nM).<sup>1</sup> It reduces the formation of endothelin-1 and increases nitric oxide in human vascular endothelial cells.<sup>2</sup> Lisinopril inhibits the pressor response to angiotensin I in anesthetized rats and dogs (ID<sub>50</sub>s = 2.3 and 6.5 µg/kg in rat and dog, respectively).<sup>1</sup>

### References

1. Patchett, A.A., Harris, E., Tristram, E.W., *et al.* A new class of angiotensin-converting enzyme inhibitors. *Nature* **288(5788)**, 280-283 (1980).
2. Desideri, G., Grassi, D., Croce, G., *et al.* Different effects of angiotensin converting enzyme inhibitors on endothelin-1 and nitric oxide balance in human vascular endothelial cells: Evidence of an oxidant-sensitive pathway. *Mediators Inflamm.* 305087 (2008).

#### 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.

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