# **PRODUCT** INFORMATION



Fosinopril-d<sub>7</sub> (sodium salt)

Item No. 31917

CAS Registry No.: Formal Name:	(2S,4S)-4-cyclohexyl-1-(2-((R)-((S)- 2-methyl-1-(propionyloxy)propoxy) (4-(phenyl-d <sub>5</sub> )butyl-4,4-d <sub>2</sub> )phosphoryl) acetyl)pyrrolidine-2-carboxylate,	
	monosodium salt	
MF:	$C_{30}H_{38}D_7NO_7P \bullet Na$	N • Na <sup>+</sup> D
FW:	592.7	
Chemical Purity:	≥98% (Fosinopril)	
Deuterium		
Incorporation:	≥99% deuterated forms (d <sub>1</sub> -d <sub>7</sub> ); ≤1% d <sub>0</sub>	
Supplied as:	A solid	
Storage:	-20°C	
Stability:	≥2 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis		

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## Laboratory Procedures

Fosinopril-d<sub>7</sub> (sodium salt) is intended for use as an internal standard for the quantification of fosinopril (Item No. 21899) 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).

Fosinopril- $d_7$  (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the fosinopril- $d_7$  (sodium salt) in the solvent of choice, which should be purged with an inert gas. Fosinopril- $d_7$  (sodium salt) is soluble in a 1:1 solution of acetonitrile:methanol. Fosinopril- $d_7$  (sodium salt) is also soluble in DMSO.

## Description

Fosinopril is a prodrug form of the angiotensin-converting enzyme (ACE) inhibitor fosinoprilat.<sup>1</sup> Oral administration of fosinopril inhibits angiotensin I-induced pressor responses in normotensive rats, dogs, and monkeys when administered at doses of 15, 15, and 10 µmol/kg, respectively. Fosinopril (2.5 mg/kg) reduces fractional shortening and decreases left ventricular size in a porcine model of congestive heart failure.<sup>2</sup> Formulations containing fosinopril have been used in the treatment of hypertension and congestive heart failure.

#### References

- 1. DeForrest, J.M., Waldron, T.L., Harvey, C., et al. Fosinopril, a phosphinic acid inhibitor of angiotensin I converting enzyme: In vitro and preclinical in vivo pharmacology. J. Cardiovasc. Pharmacol. 14(5), 730-736 (1989).
- 2. McElmurray, J.H., III, Mukherjee, R., New, R.B., et al. Angiotensin-converting enzyme and matrix metalloproteinase inhibition with developing heart failure: Comparative effects on left ventricular function and geometry. J. Pharmacol. Exp. Ther. 291(2), 799-811 (1999).

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

#### SAFFTY 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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