PRODUCT INFORMATION



4(Z),7(Z)-Decadienoic Acid-d₅

Item No. 14896

Formal Name: Synonym:	deca-4Z,7Z-dienoic-9,9',10,10,10-d ₅ acid FA 10:2-d ₅	
MF:	$C_{10}H_{11}D_{5}O_{2}$	
FW:	173.3 D	
Chemical Purity:	≥90% (4(Z),7(Z)-Decadienoic Acid)	
Deuterium		COOH
Incorporation:	\geq 99% deuterated forms (d ₁ -d ₅); \leq 1% d ₀ D D	
Supplied as:	A solution in ethanol	
Storage:	-20°C	
Stability:	≥2 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

Laboratory Procedures

4(Z),7(Z)-Decadienoic acid-d₅ is intended for use as an internal standard for the quantification of 4(Z),7(Z)-decadienoic acid 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).

4(Z),7(Z)-Decadienoic acid-d₅ is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of 4(Z),7(Z)-decadienoic acid-d₅ in these solvents is approximately 50 mg/ml.

Description

4(Z),7(Z)-Decadienoic acid-d₅ is an impurity generated during the synthesis of docosahexaenoic acid-d₅ (Item No. 10005057). While the physiological properties of this compound are not known, dietary intake of n-3 polyunsaturated fatty acids provides potential health benefits.¹

Reference

1. Vaughan, V.C., Hassing, M.-R., and Lewandowski, P.A. Marine polyunsaturated fatty acids and cancer therapy. Br. J. Cancer 108(3), 486-492 (2013).

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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