



(±)8(9)-DiHET-d₁₁

Cat. No.:	OB0626WX-2896
Appearance:	Liquid
Purity:	≥99% (deuterated forms, d1-d11)
Identity:	Confirmed by TLC and HPLC.
Size:	25 µg; 50 µg; 100 µg; 250 µg

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description	(±)8(9)-DiHET-d ₁₁ is a multi-deuterated internal standard optimized for the precise mass spectrometric detection of vicinal diols arising from eicosanoid metabolism. The native compound represents the direct enzymatic hydration product of 8(9)-epoxyeicosatrienoic acid, generated in distinct stereoisomeric proportions through the catalytic activity of cytosolic epoxide hydrolase.
Formulation	Ethanol solution (100 µg/mL)
Labeling	Stable isotope-labeled
Synonyms	(±)8,9-dihydroxy-5Z,11Z,14Z-eicosatrienoic-16,16,17,17,18,18,19,19,20,20,20-d ₁₁ acid; (±)8,9-DiHET-d ₁₁
Formula	C ₂₀ H ₂₃ D ₁₁ O ₄
Formula Weight	349.6

Specification

Solubility in DMSO	50 mg/mL
Solubility in Ethanol	50 mg/mL
Solubility in DMF	50 mg/mL
Solubility in Other Solvents	PBS: 1 mg/mL
InChI	InChI=1S/C20H34O4/c1-2-3-4-5-6-7-8-9-12-15-18(21)19(22)16-13-10-11-14-17-20(23)24/h6-7,9-10,12-13,18-19,21-22H,2-5,8,11,14-17H2,1H3,(H,23,24)/b7-6-,12-9-,13-10-/t18-,19-/m1/s1/i1D3,2D2,3D2,4D2,5D2



InChI Key	DCJBINATHQHPKO-IYSPHMKSSA-N
Canonical SMILES	<chem>O[C@H](C/C=C\CCCC(O)=O)[C@H](O)C/C=C\C/C=C\C([2H])([2H])C([2H])([2H])C([2H])([2H])C([2H])([2H])C([2H])([2H])C([2H])([2H])[2H]</chem>
Stability	1 year
Storage	Storage at -20°C.
Applications	(±)8(9)-DiHET-d ₁₁ serves as a stable isotope-labeled reference compound for quantitative lipidomics and LC-MS/MS analysis of dihydroxyeicosatrienoic acid metabolites. It supports analytical calibration, structural identification, and profiling of epoxy fatty acid transformation products.