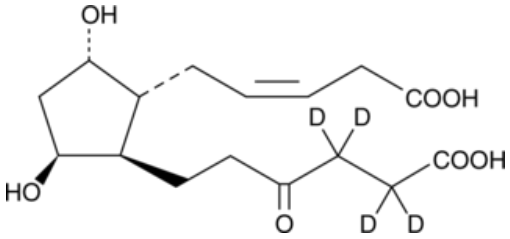
Product Data Sheet

Product Name: PGDM-d4
Cat. No.: GC47942

Chemical Properties

Cas. No.	N/A		
SMILES	O[C@@H]1[C@H](C/C=C\CC(O)=O)[C@@H](CCC(C([2H])([2H])C([2H])([2H])C(O)=O)=O)[C@@H](O)C1		
Formula	C16H20D4O7	M.Wt	332.4
Solubility	DMF: 50 mg/ml,DMSO: 50 mg/ml,Ethanol: 50 mg/ml,PBS (pH 7.2): 1 mg/ml	Storage	Store at -80°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

Prostaglandin DM (PGDM)-d_4 contains four deuterium atoms at the 18, 18', 19 and 19' positions. It is intended for use as an internal standard for the quantification of PGDM by GC- or LC-mass spectrometry. PGD_2 plays a pharmacological role in allergic and asthmatic anaphylaxis, normal physiological sleep and lowering of body temperature, as well as inhibits platelet aggregation and relaxes vascular smooth muscle.[1] PGDM is a major urinary metabolite of PGD_2 with a unique lower sidechain that readily undergoes reversible cyclization.[2] It is used as a biomarker to assess endogenous production of PGD_2.

1.Giles, H., and Leff, P.The biology and pharmacology of PGD2Prostaglandins35(2)277-300(1988)

Caution: Product has not been fully validated for medical applications. For research use only.
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2.Morrow, J.D., Prakash, C., Awad, J.A., et al.Quantification of the major urinary metabolite of prostaglandin D2 by a stable isotope dilution mass spectrometric assayAnal. Biochem.193(1)142-148(1991)