

PRODUCT INFORMATION

Primary Prostaglandin Metabolite MaxSpec® LC-MS Mixture

Item No. 19300

Purity: ≥95% for each compound
Supplied as: A solution in ethanol (1 µg/ml of each compound)
Fill volume: >1 ml
Storage: -80°C
Stability: ≥5 years

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

Description

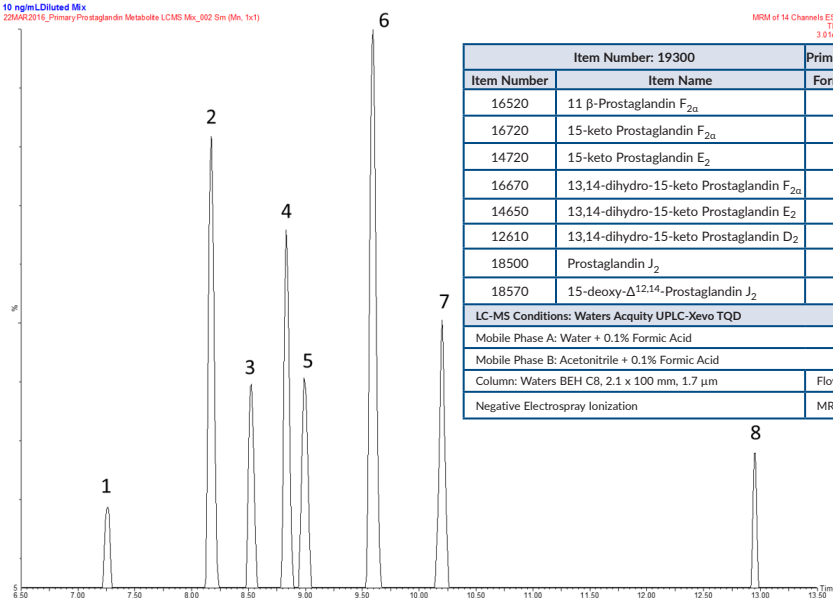
This mixture contains the first prominent metabolites of the primary prostaglandins (PGs) PGE₂, PGD₂, and PGF_{2α}. The mixture is supplied in an amber ampule in which the headspace has been purged with argon to prevent lipid oxidation. This product has been designed for direct use in LC-MS applications. The solution may be serially diluted for preparation of calibrators and QC standards and/or used directly as a system suitability standard or tuning standard. After opening, we recommend that the mixture be transferred immediately to a 2 ml glass screw cap vial, to prevent solvent evaporation, and stored at -80°C. The mixture should be discarded after multiple freeze/thaw cycles.

The majority of the primary PG metabolites represented in this mixture are formed by metabolism of PGE₂, PGD₂, and PGF_{2α} via the 15-hydroxy PGDH enzymatic pathway and are biologically inactive. 11β-PGF_{2α} is a biologically active metabolite of PGD₂ that is formed enzymatically in a stereospecific manner by PGF synthase. It is further metabolized to the inactive metabolite PGDM by β-oxidation on both the upper and lower side chains. The PGJ₂ metabolites of PGD₂, are formed non-enzymatically and retain biological activity of various types. These analytes have been used extensively as plasma or urinary biomarkers to assess endogenous production of their respective parent prostaglandins.

Contents

10 ng/mL Diluted Mix
 22MAR2016_Primary Prostaglandin Metabolite LCMS Mix_002 Sm (Mn, 1x1)

MRM of 14 Channels ES-
 TIC
 3.01e4



Item Number: 19300		Primary Prostaglandin Metabolite MaxSpec® LC-MS Mixture		
Item Number	Item Name	Formula Weight	MS/MS Transition	Peak
16520	11 β-Prostaglandin F _{2α}	354.5	353>193	1
16720	15-keto Prostaglandin F _{2α}	352.5	351>315	2
14720	15-keto Prostaglandin E ₂	350.5	349>113	3
16670	13,14-dihydro-15-keto Prostaglandin F _{2α}	354.5	353>113	4
14650	13,14-dihydro-15-keto Prostaglandin E ₂	352.5	351>175	5
12610	13,14-dihydro-15-keto Prostaglandin D ₂	352.5	351>207	6
18500	Prostaglandin J ₂	334.5	333>189	7
18570	15-deoxy-Δ ^{12,14} -Prostaglandin J ₂	316.4	315>203	8
LC-MS Conditions: Waters Acquity UPLC-Xevo TQD				
Mobile Phase A: Water + 0.1% Formic Acid				
Mobile Phase B: Acetonitrile + 0.1% Formic Acid				
Column: Waters BEH C8, 2.1 x 100 mm, 1.7 µm			Flow Rate: 400 µl/min	
Negative Electrospray Ionization			MRM Scan	

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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