

# PRODUCT INFORMATION

## Primary Prostaglandin Metabolite LC-MS Mixture

Item No. 19300

**Purity:** ≥95% for each compound  
**Supplied as:** A solution in ethanol (1 µg/ml of each compound)  
**Storage:** -20°C  
**Stability:** As supplied, 1 year from the QC date provided on the Certificate of Analysis, when stored properly

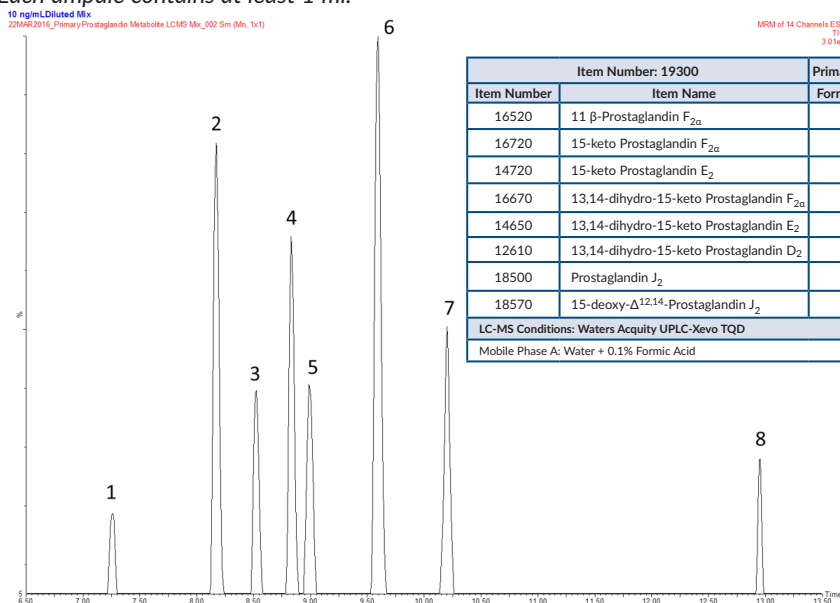
## Description

This mixture contains the first prominent metabolites of the primary prostaglandins (PGs) PGE<sub>2</sub>, PGD<sub>2</sub>, and PGF<sub>2α</sub>. 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 -20°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 PGE<sub>2</sub>, PGD<sub>2</sub>, and PGF<sub>2α</sub> via the 15-hydroxy PGDH enzymatic pathway and are biologically inactive. 11β-PGF<sub>2α</sub> is a biologically active metabolite of PGD<sub>2</sub> 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 PGJ<sub>2</sub> metabolites of PGD<sub>2</sub>, 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

Each ampule contains at least 1 ml.



Item Number: 19300		Primary Prostaglandin Metabolite LC-MS Mixture		
Item Number	Item Name	Formula Weight	MS/MS Transition	Peak
16520	11 β-Prostaglandin F <sub>2α</sub>	354.5	353>193	1
16720	15-keto Prostaglandin F <sub>2α</sub>	352.5	351>315	2
14720	15-keto Prostaglandin E <sub>2</sub>	350.5	349>113	3
16670	13,14-dihydro-15-keto Prostaglandin F <sub>2α</sub>	354.5	353>113	4
14650	13,14-dihydro-15-keto Prostaglandin E <sub>2</sub>	352.5	351>175	5
12610	13,14-dihydro-15-keto Prostaglandin D <sub>2</sub>	352.5	351>207	6
18500	Prostaglandin J <sub>2</sub>	334.5	333>189	7
18570	15-deoxy-Δ <sup>12,14</sup> -Prostaglandin J <sub>2</sub>	316.4	315>203	8
LC-MS Conditions: Waters Acquity UPLC-Xevo TQD				
Mobile Phase A: Water + 0.1% Formic Acid				

**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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