PRODUCT INFORMATION

Secondary Prostaglandin Metabolite MaxSpec® LC-MS Mixture

Item No. 19422

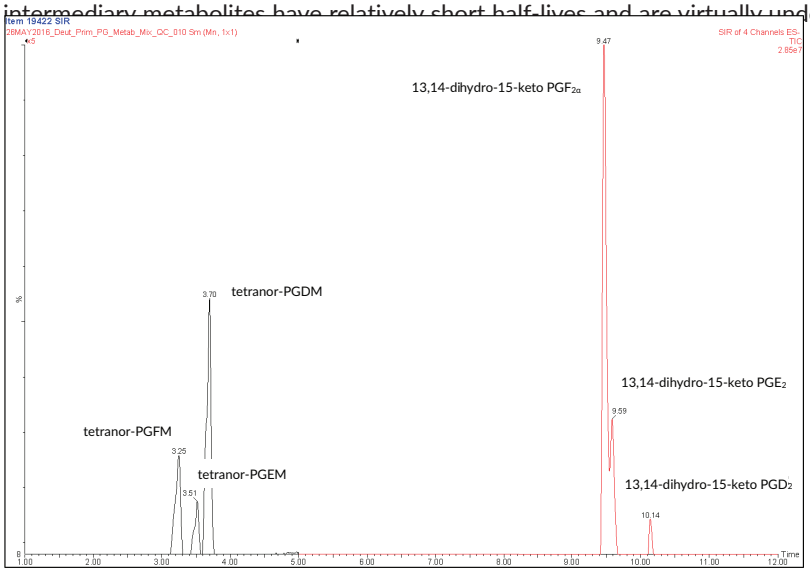
Purity: ≥98% for each compound
Supplied as: A solution in acetonitrile (1 µg/ml of each compound)
Fill Volume: >1 ml
Storage: -80°C
Stability: ≥5 years

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

Description and Contents

This mixture contains the intermediary and secondary metabolites of prostaglandins (PGs) PGE_2 (Item No. 14010), PGD_2 (Item No. 12010), and $PGF_{2\alpha}$ (Item No. 16010). 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 1 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 tetranor-PG metabolites represented in this mixture are the major urinary metabolites of PGE_2, PGD_2, and $PGF_{2\alpha}$ and, while biologically inactive, are used extensively as biomarkers to assess endogenous production of their respective parent PGs. 13,14-dihydro-15-keto PGs are intermediary metabolites of their respective parent PGs formed through the 15-hydroxy PGDH pathway. Though biologically active, these intermediary metabolites have relatively short half-lives and are virtually undetectable in urine.



Item Number: 19422		Secondary Primary Prostaglandin Metabolite MaxSpec® LC-MS Mixture	
Item Number	**Item Name**	**Formula Weight:**	**MS/MS Transition:**
16840	tetranor-PGFM	330.4	329>311
14840	tetranor-PGEM	328.4	327>309
12850	tetranor-PGDM	328.4	327>309
16670	13,14-dihydro-15-keto Prostaglandin $F_{2\alpha}$	354.5	353>193
14650	13,14-dihydro-15-keto Prostaglandin E_2	352.5	351>113
12610	13,14-dihydro-15-keto Prostaglandin D_2	352.5	351>175
LC-MS Conditions: Waters Acquity UPLC-Xevo TQ-Smicro			
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			SIR Scan

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