

# PRODUCT INFORMATION



## Deuterated Primary Prostaglandin Metabolite MaxSpec® LC-MS Mixture Item No. 19304

**Supplied as:** A solution in ethanol (1 µg/ml of each compound)  
**Fill volume:** >1 ml  
**Storage:** -20°C  
**Stability:** ≥5 years

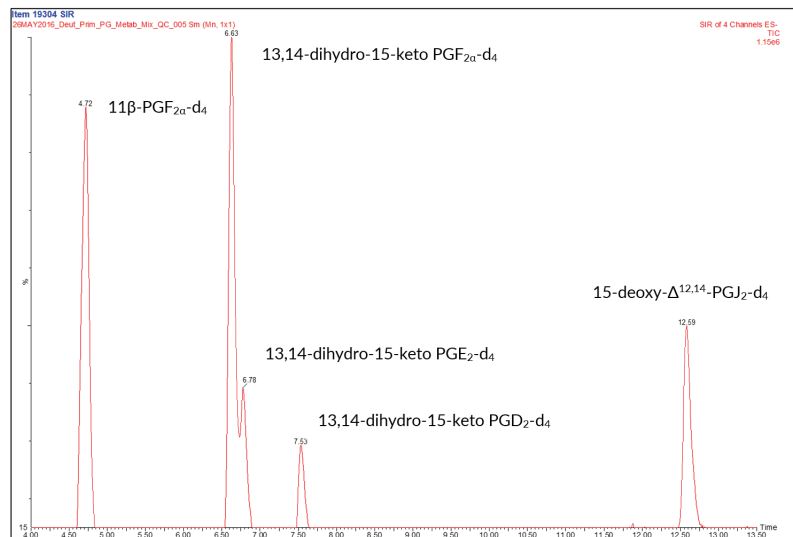
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Description

The Deuterated Primary Prostaglandin Metabolite MaxSpec® LC-MS mixture contains deuterated forms of selected eicosanoids produced by the metabolism of arachidonic acid *via* the COX pathway. 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. This mixture is ideally suited for use as an internal standard in mass spectrometry applications. It should be noted that the mixture contains isobaric analytes. 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.

Prostaglandin (PG) D<sub>2</sub> (Item No. 12010), PGE<sub>2</sub> (Item No. 14010), and PGF<sub>2α</sub> (Item No. 16010) are metabolized rapidly by the 15-hydroxy PG dehydrogenase pathway, giving 13,14-dihydro-15-keto PGD<sub>2</sub> (Item No. 12610), 13,14-dihydro-15-keto PGE<sub>2</sub> (Item No. 14650), and 13,14-dihydro-15-keto PGF<sub>2α</sub> (Item No. 16670), respectively. PGD<sub>2</sub> is also metabolized to 11β-PGF<sub>2α</sub> (Item No. 16520) by 11-ketoreductase and non-enzymatically to 15-deoxy-Δ<sup>12,14</sup>-PGJ<sub>2</sub> (Item No. 18570). This mixture contains deuterated forms of these five metabolites.

### Contents



Item Number: 19304		Deuterated Primary Prostaglandin Metabolite MaxSpec® LC-MS Mixture	
Item Number	Item Name	Formula Weight:	MS/MS Transition:
10008989	11β-Prostaglandin F <sub>2α</sub> -d <sub>4</sub>	358.5	357>197
10007793	13,14-dihydro-15-keto Prostaglandin F <sub>2α</sub> -d <sub>4</sub>	358.4	357>187
10010606	13,14-dihydro-15-keto Prostaglandin E <sub>2</sub> -d <sub>4</sub>	356.5	355>113
10007978	13,14-dihydro-15-keto Prostaglandin D <sub>2</sub> -d <sub>4</sub>	356.5	355>211
318570	15-deoxy-Δ <sup>12,14</sup> -Prostaglandin J <sub>2</sub> -d <sub>4</sub>	320.5	319>203

**LC-MS Conditions:**  
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

#### 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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