## **PRODUCT** INFORMATION



Vascular Eicosanoid Urinary Metabolite MaxSpec<sup>®</sup> LC-MS Mixture Item No. 19668

Purity:	≥98% for each compound
Supplied as:	A solution in ethanol (1 μg/ml of each compound)
Fill Volume:	>1 ml
Storage:	-20°C
Stability:	≥7 years

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

### Description

This mixture contains a collection of metabolites of the major vasoactive eicosanoids, prostaglandin  $l_2$ (PGI<sub>2</sub>; Item No. 18220) and thromboxane A<sub>2</sub> (TXA<sub>2</sub>), as well as of several oxylipins postulated to regulate vasoconstriction. 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.

Whereas PGI<sub>2</sub> is a potent vasodilator and inhibitor of human platelet aggregation, TXA<sub>2</sub> causes irreversible platelet aggregation and contraction of vascular and bronchial smooth muscle. Because both are rapidly metabolized, their urinary metabolites, 11-dehydro TXB<sub>2</sub> (Item No. 19500), 2,3-dinor TXB<sub>2</sub> (Item No. 19050), 11-dehydro-2,3-dinor TXB<sub>2</sub> (Item No. 19510), and 2,3-dinor-6-keto PGF<sub>1a</sub> (Item No. 15120), serve as useful markers for their synthesis.<sup>1-6</sup> The diol metabolites of various epoxyeicosatrienoic acids (EETs) have been used to document the oxylipins involved in vasoconstriction and hypertension.<sup>7-9</sup>

#### Contents



Item Number: 19668		Vascular Eicosanoid Urinary Metabolite MaxSpec <sup>®</sup> LC-MS Mixture		
Item Number	Item Name	Formula Weight:	MS/MS Transition:	
15120	2,3-dinor-6-keto Prostaglandin F <sub>1α</sub> (sodium salt)	364.4	341>135	
19050	2,3-dinor Thromboxane B <sub>2</sub>	342.4	341>141	
19510	11-dehydro-2,3-dinor Thromboxane B <sub>2</sub>	340.4	339>277	
19500	11-dehydro Thromboxane B <sub>2</sub>	368.5	367>305	
51651	(±)14(15)-DiHET	338.5	337>207	
51511	(±)11(12)-DiHET	338.5	337>167	
51351	(±)8(9)-DiHET	338.5	337>127	
90030	20-HETE	320.5	319>59	
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	
LC Gradient: 15%B to 95%B over 18 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

uyer 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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### CAYMAN CHEMICAL

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### References

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