

PRODUCT INFORMATION



Vascular Eicosanoid Urinary Metabolite LC-MS Mixture

Item No. 19668

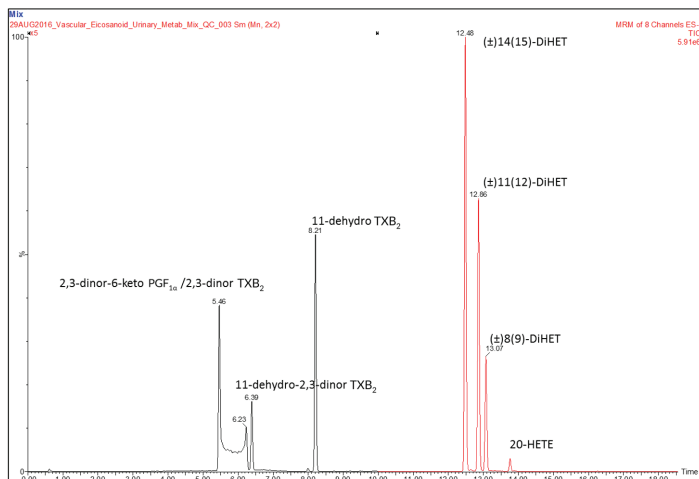
Purity: ≥98% for each compound
Supplied as: A solution in ethanol (1 µg/ml of each compound)
Storage: -20°C
Stability: ≥3 years

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

Description and Contents

This mixture contains a collection of metabolites of the major vasoactive eicosanoids, prostaglandin I₂ (PGI₂; Item No. 18220) and thromboxane A₂ (TXA₂), 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 PGI₂ is a potent vasodilator and inhibitor of human platelet aggregation, TXA₂ causes irreversible platelet aggregation and contraction of vascular and bronchial smooth muscle. Because both are rapidly metabolized, their urinary metabolites, 11-dehydro TXB₂ (Item No. 19500), 2,3-dinor TXB₂ (Item No. 19050), 11-dehydro-2,3-dinor TXB₂ (Item No. 19510), and 2,3-dinor-6-keto PGF_{1α} (Item No. 15120), serve as useful markers for their synthesis.¹⁻⁶ The diol metabolites of various epoxyeicosatrienoic acids (EETs) have been used to document the oxylipins involved in vasoconstriction and hypertension.⁷⁻⁹



Item Number: 19668		Vascular Eicosanoid Urinary Metabolite LC-MS Mixture	
Item Number	Item Name	Formula Weight	MS/MS Transition
15120	2,3-dinor-6-keto Prostaglandin F _{1α} (sodium salt)	364.4	341>135
19050	2,3-dinor Thromboxane B ₂	342.4	341>141
19510	11-dehydro-2,3-dinor Thromboxane B ₂	340.4	339>277
19500	11-dehydro Thromboxane B ₂	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
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