

PRODUCT INFORMATION



Primary Vascular Eicosanoid MaxSpec® LC-MS Mixture

Item No. 19667

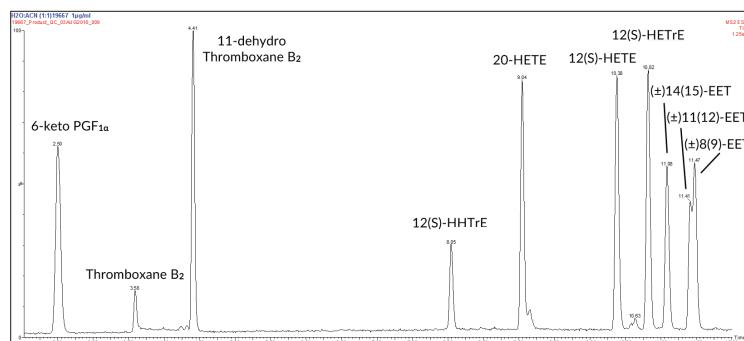
Purity: ≥98% for each compound
Supplied as: A solution in ethanol (1 µg/ml of each compound)
Fill Volume: >1 ml
Storage: -20°C
Stability: ≥5 years

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 vasoactive eicosanoids, including the characteristic metabolites of both prostaglandin I₂ (PGI₂; Item No. 18220) and thromboxane A₂ (TXA₂), as well as several additional HETE and EET metabolites produced by platelets and the cytochrome P450 pathway of arachidonic acid metabolism. 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 hydrolyzed and metabolized, TXB₂ (Item No. 19030), 11-dehydro TXB₂ (Item No. 19500), and 6-keto PGF_{1α} (Item No. 15210) serve as useful markers for their synthesis.^{1,2} Certain HETEs and EETs have been shown to either inhibit platelet activation or regulate vasoconstriction.³⁻⁹



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Item Number	Item Name	Formula Weight:	MS/MS Transition:
15210	6-keto Prostaglandin F _{1α}	370.5	369>163
19030	Thromboxane B ₂	370.5	369>169
19500	11-dehydro Thromboxane B ₂	368.5	367>305
34590	12(S)-HHTrE	280.4	279>179
90030	20-HETE	320.5	319>289
34570	12(S)-HETE	320.5	319>179
18483	12(S)-HETrE	322.5	321>181
50651	(±)14(15)-EET	320.5	319>175
50511	(±)11(12)-EET	320.5	319>167
50351	(±)8(9)-EET	320.5	319>155
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: 25%B to 95%B over 20 min			
Negative Electrospray Ionization			MS (Full) 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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