Available Assays

VANDERBILT UNIVERSITY labnodes

The Eicosanoid Core Laboratory is a Vanderbilt University Shared Resource designated for the analysis of oxidation products of arachidonic acid and other polyunsaturated fatty acids. These molecules include isoprostanes, prostaglandins, leukotrienes, epoxyeicosatetraenoic acids (EETs), and hydroxy- and di-hydroxy-eicosatetraenoic acids (20-HETE and DHETs), and their metabolites. The services available in the Core are listed in the Table below. All of the assays performed are validated highly precise, accurate, and sensitive mass spectrometric assays, many of which were developed by Core personnel.

Expand

Analyte	Matrix
20-hydroxy-eicosatetraenoic acid (20-HETE)	Plasma, Tissues, Cells/Media
Di-hydroxy-eicosatetraenoic acids (DHETs)	Plasma, Tissues, Cells/Media
Epoxyeicosatetraenoic acids (EETs)	Plasma, Tissues, Cells/Media
F_2-Isoprostanes	Plasma, Urine, Tissues, Cells/Media, CSF, BAL
F_2-Isoprostane metabolite	Urine
F_3-Isoprostanes (from eicosapentaenoic acid)	Plasma, Urine, Tissues, Cells/Media, CSF, BAL
F_4-Isoprostanes/Neuroprostanes (from eicosapentaenoic acid)	Plasma, Urine, Tissues, Cells/Media, CSF, BAL
Isofurans	Plasma, Urine, Tissues, Cells/Media, CSF, BAL
Thromboxane B_2	Serum
PGE_2 metabolite	Urine
PGD_2 metabolite	Urine
PGI_2 (prostacyclin) metabolite	Urine
Thromboxane B_2 metabolite	Urine
Leukotriene B_4	Cells/Media
Leukotriene E_4	Urine
Parent Prostaglandins (F, D, E, J, A, I, and thromboxane B_2)	Tissues, Cells/Media, CSF, EBC, BAL