

About Lipid Mediators

Inflammatory lipid mediators are potent signal molecules derived from the oxidation of phospholipids and ω -6 polyunsaturated fatty acids. They play significant roles in regulating a multitude of physiological and cellular processes.

Inflammatory lipid mediators are implicated in numerous diseases, including inflammatory disorders, cancer, heart diseases, metabolic diseases, and neurological diseases.

This panel measures the eleven key species of inflammatory lipid mediators that are prominent in human plasma. Covered lipid mediators classes are: prostaglandins, hydroxyeicosatetraenoic acids (HETE), hydroxyoctadecadienoic acids (HODE), dihydroxy-octadecenoic acids (diHOME) and their fatty acid precursors linoleic acid and arachidonic acid.

Key Advantages - Reproducible Results

- Comprehensive panel covering inflammatory lipid mediator pathways
- Fully quantitative LC-MS/MS method with minimum of 6 to 8 calibrators per analyte matching stable isotope labeled internal standards for each analyte
- Calibrator and quality control sample precision (% CV) typically <10%
- Low sample volume requirement

Analytical Method and Instrumentation

- Analysis by LC-MS/MS
- Sciex Exion UHPLC, coupled to a Sciex 7500+ Triple Quadrupole Mass Spectrometer

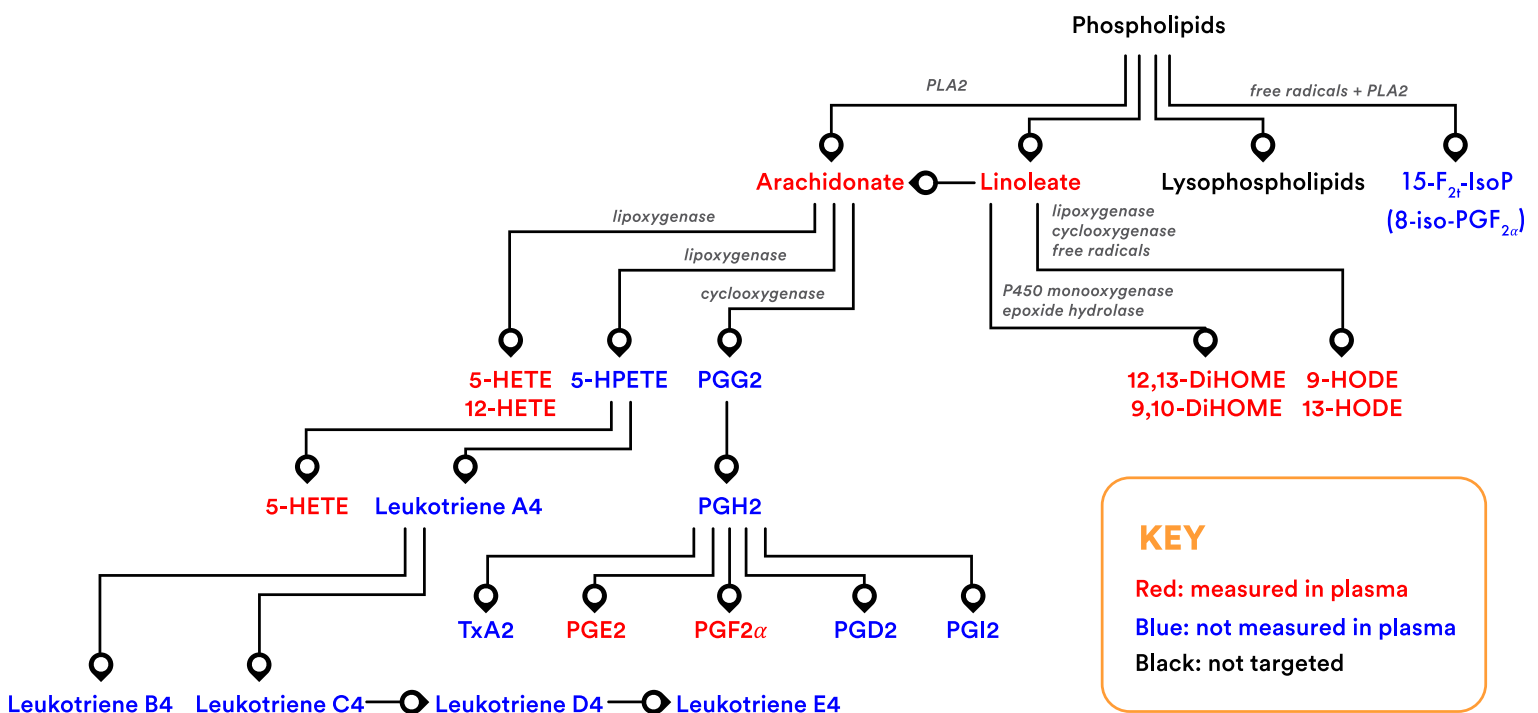
Measured Lipid Mediators and Metabolites

Analytes	
12, 13-DiHOME	12-HETE
9, 10-DiHOME	5-HETE
13-HODE	Linoleate
9-HODE	Arachidonate
15-HETE	Prostaglandin E2
	Prostaglandin F _{2α}

Sample Requirements

Sample Matrix	Sample Amount
Plasma/Serum	200 μ L

Lipid Mediator Biosynthesis



KEY

- Red: measured in plasma
- Blue: not measured in plasma
- Black: not targeted