Oxygenated metabolites derived from eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA), and/or arachidonic acid, termed the resolvins, protectins, and lipoxins, are emerging as a significant part of anti-inflammatory and immunoregulatory actions. In addition to being anti-inflammatory, these lipid mediators promote the resolution of the inflammatory response back to a non-inflamed state by reducing polymorphonuclear leukocyte (PMNL) transendothelial migration and infiltration, the earliest events in acute inflammation that over the long-term or if gone awry, demonstrate harmful effects. Cayman carries a number of these lipid mediators to aid in research purposed toward resolving the detrimental consequences of inflammatory and immunological diseases.

Resolvin D1 EIA Kit

Resolvin D1 (RvD1) is produced physiologically from the sequential oxygenation of DHA by 15- and 5-lipoxygenase. The 17(R)-epimer of RvD1 can also be generated with aspirin-treatment. Both RvD1 and its 17(R) configuration reduce human polymorphonuclear leukocyte (PMNL) transendothelial migration, the earliest event in acute inflammation. RvD1 exhibits antihyperalgesic effects in a rat model of adjuvant-induced arthritis and prevents and inhibits the TRP channels, TRPA1, TRPV3, and TRPV4, producing anti-nociceptive effects. Cayman’s Resolvin D1 EIA Kit is a competitive assay that can be used for quantification of RvD1.

Chemokine-Like Receptor 1 Polyclonal Antibody

Antigen: human CMKLR1 amino acids 358–371 (NERTSMNERETGML). Host: rabbit. Application(s): FC, ICC, and WB. Chemokine-Like Receptor 1 (CMKLR1) is a G protein-coupled receptor relevant to the cellular chemotaxis of dendritic cells and macrophages. This receptor is also expressed in brain, liver, lung, and kidney tissues. Chemerin, or TIG2, has been identified as the natural ligand for this receptor. Resolvin E1 has also been identified as a ligand for CMKLR1; acting to dampen cellular responses to inflammation. Chemerin is an 18 kDa protein that plays a role in immunity, inflammation, chemotaxis, and has been identified as an adipokine.