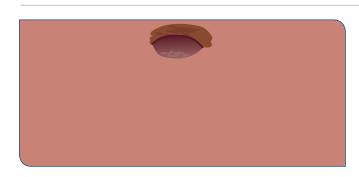
# Specialized Pro-Resolving Mediators

Specialized pro-resolving mediators (SPMs) are an important group of signaling molecules derived from arachidonic acid, eicosapentaenoic acid, docosapentaenoic acid, and docosahexaenoic acid that are liberated during the inflammatory process. Studies have shown that resolvins, lipoxins, maresins, and protectins evoke responses that help to resolve an inflammatory episode. Cayman has synthesized an array of these key lipid mediators to aid in a better understanding of this process.





### SPMs RESOLVE INFLAMMATORY RESPONSE AFTER IN JURY/INFECTION

+ Protectins + Lipoxins

+ Maresins + E-, D-, and T-Series Resolvins

Request the SPM Pathway Wall Poster at www.caymanchem.com/Literature

### **SPM Precursors**

Item No.	Product Name	Description
90010	Arachidonic Acid	A precursor for prostaglandins, thromboxanes, leukotrienes, and lipoxins
90310	Docosahexaenoic Acid	A precursor for D-series resolvins, maresins, and protectins
90165	Docosapentaenoic Acid	A precursor for T-series resolvins
90110	Eicosapentaenoic Acid	A precursor for E-series resolvins

Metabolites, methyl ester, and deuterated forms are available online

### **Pro-Resolving Compounds** Resolvins

Item No.	Product Name		
10012554	Resolvin D1		
13060	17(R)-Resolvin D1		
10007279	Resolvin D2		
11184	Resolvin D2-d <sub>5</sub>		
13834	Resolvin D3		
19512	Resolvin D3-d <sub>5</sub>		
13835	Resolvin D4		
9002881	17(R)-Resolvin D4		
10007280	Resolvin D5		
10007848	Resolvin E1		
10009854	Resolvin E1-d <sub>4</sub>		

### Lipoxins, Maresins, and Protectins

Item No.	Product Name
90410	Lipoxin A <sub>4</sub>
10007737	Lipoxin A <sub>4</sub> -d <sub>5</sub>
90420	Lipoxin B <sub>4</sub>
10878	Maresin 1
16369	Maresin 2
17007	MCTR1
17008	MCTR2
19067	MCTR3
19064	PCTR1
19065	PCTR2
19066	PCTR3

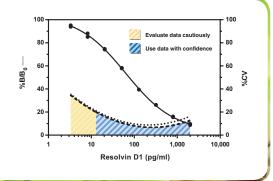
Common SPMs listed, more compounds including methyl ester and deuterated forms available online

## Quantify Resolvin D1

### Resolvin D1 ELISA Kit - Item No. 500380

- Detect RvD1 in multiple sample types
- Assay 24 samples in triplicate or 36 samples in duplicate
- Measure RvD1 levels down to 15 pg/ml
- Incubation: 18 hours | Development: 90-120 minutes

Read: Colorimetric at 405-420 nm



### **Additional Assay Kits**

Item No.	Product Name	Features
501150	Maresin 1 ELISA Kit	<ul> <li>Detect MaR1 in human urine</li> <li>Assay 24 samples in triplicate or 36 samples in duplicate</li> <li>Measure MaR1 levels down to 6 pg/ml</li> <li>Incubation: 18 hours   Development: 90-120 minutes</li> <li>Read: Colorimetric at 405-420 nm</li> </ul>
501120	Resolvin D2 ELISA Kit	<ul> <li>Detect RvD2 in multiple sample types</li> <li>Assay 24 samples in triplicate or 36 samples in duplicate</li> <li>Measure RvD2 levels down to 10 pg/ml</li> <li>Incubation: 18 hours   Development: 90-120 minutes</li> <li>Read: Colorimetric at 405-420 nm</li> </ul>

### **Enzymes**

Item No.	Product Name	Summary
60122	COX-2 (human recombinant)	N-terminal His-tagged enzyme expressed in Sf21 cells
18356	COX-2 (ovine recombinant)	Recombinant protein expressed in Sf21 cells
60402	5-Lipoxygenase (human recombinant)	Recombinant protein expressed in Sf9 cells
10341	12-Lipoxygenase (platelet-type, mouse recombinant)	Active C-terminal His-tagged protein expressed in Sf29 cells
10011263	15-Lipoxygenase-2 (human recombinant)	Active C-terminal His-tagged protein expressed in E. coli
10011669	Soluble Epoxide Hydrolase (human recombinant)	Active N-terminal His-tagged protein expressed in Sf21 cells
10011670	Soluble Epoxide Hydrolase (mouse recombinant)	N-terminal His-tagged protein expressed in Sf21 cells

#### **LC-MS Mixtures**

Item No.	Product Name	Supplied As	Contains (100 ng/ml of each compound)
19412	Lipoxin LC-MS Mixture	1 ampule	Lipoxin $B_4$ , Lipoxin $A_4$ , 15(R)-Lipoxin $A_4$ , Arachidonic Acid
18702	SPM D-series LC-MS Mixture	1 ampule	Resolvin D3, Resolvin D2, 17(R)-Resolvin D1, Resolvin D1, Resolvin D5, Docosahexaenoic Acid
19417	SPM E-series LC-MS Mixture	1 ampule	Resolvin E1, (±)18-HEPE, Eicosapentaenoic Acid



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