Table S1 MRM transition, chromatographic condition, LOD, LLOQ, calibration range and linear regression for AA and its metabolites

Metabolites	CAS NO.	Formula	Precursor ion (*m/z*)	Product ion (*m/z*)	DP	CE	Rention time (min)	LOD (S/N=3) (ng mL^{-1})	LLOQ (S/N=5) (ng mL^{-1})	linearity (ng mL^{-1})	Correlation (*r*)
17(18)-EpETE	/	C20H30O3	317	259,299,255,215	-50	-16	8.21	0.02	0.05	0.05-500	0.997
19(20)-EpDPA	/	C22H32O3	343	299,281,241,325	-50	-17	10.1	0.2	0.5	0.5-500	0.99812
9-HEPE	286390-03-2	C20H30O3	317	167,255,273,149	-70	-25	7.41	0.05	0.1	0.1-20	0.99818
15-HETE	71030-36-9	C20H32O3	319	219,175,257,301	-20	-20	8.14	0.02	0.05	0.05-500	0.99855
16-HETE	128914-46-5	C20H32O3	319	233,257,189,301	-25	-20	7.32	0.02	0.05	0.05-500	0.99777
PGB3	36614-32-1	C20H28O4	331	202,175,262,313	-40	-26	3.68	0.02	0.05	0.05-500	0.99615
12-HEPE	81187-21-5	C20H30O3	317	179,255,135,299	-40	-20	7.2	0.02	0.05	0.05-500	0.99862
5-Oxo-EE	106154-18-1	C20H30O3	317	203,245,273,299	-90	-24	11.14	0.05	0.1	0.1-500	0.99876
5(6)-DiHET	213382-49-1	C20H34O4	337	145,191,255,319	-60	-23	7.05	0.05	0.1	0.1-500	0.99722
8(9)-EpETE	851378-93-3	C20H30O3	317	255,203,273,299	-65	-16	9.19	0.1	0.1	0.2-500	0.99854
14-HDHA	87042-40-8	C22H32O3	343	205,281,161,234	-55	-18	8.72	0.05	0.1	0.1-500	0.99807
9-HETE	79495-85-5	C20H32O3	319	167,257,179,301	-46	-20	9.33	0.05	0.1	0.1-500	0.99883
11-HEPE	99217-78-4	C20H30O3	317	167,195,255,299	-50	-20	6.95	0.05	0.05	0.1-500	0.99685
5-HETE	73307-52-5	C20H32O3	319	115,203,257,301	-63	-20	9.76	0.02	0.01	0.05-500	0.99886
17-HETE	128914-47-6	C20H32O3	319	247,203,257,301	-70	-20	7.23	0.05	0.05	0.1-500	0.99797
LTE4	75715-89-8	C23H37NO5S	438	333,351,420,235	-30	-26	3.94	0.05	0.1	0.1-500	0.99807

LTD4	73836-78-9	C25H40N2O6S	495	177,143,477	-52	-26	3.71	0.02	0.05	0.05-500	0.99831
14(15)-EpEDE	351533-80-7	C20H34O3	321	221,113,209,303	-83	-19	11.95	0.05	0.1	0.1-500	0.99785
11,12-EpETE	504435-15-8	C20H30O3	317	167,179,255,299	-25	-19	8.98	0.02	0.05	0.05-500	0.99707
16(17)-EpDPA	155073-46-4	C22H32O3	343	233,299,281,259	-35	-16	10.75	0.1	0.2	0.2-500	0.9987
20-HDHA	90906-41-5	C22H32O3	343	281,241,133,299,325	-52	-19	10.75	0.5	0.5	0.5-500	0.99736
11-HDHA	87018-59-5	C22H32O3	343	121,149,281,165,325	-35	-20	9.06	0.02	0.05	0.05-500	0.99864
8-HDHA	90780-54-4	C22H32O3	343	189,109,135	-70	-16	9.46	0.02	0.05	0.05-500	0.9978
20-hydroxy LTB4	79516-82-8	C20H32O5	351	195,333	-52	-24	2.7	0.02	0.05	0.05-200	0.99789
PGG2	51982-36-6	C20H32O6	367	235,187,269	-74	-13	3.5	0.02	0.05	0.05-500	0.99305
LTC4	72025-60-6	C30H47N3O9S	624	272,254,306,606	-53	-32	3.78	0.05	0.1	0.1-500	0.99689
5(S)-HpETE	71774-08-8	C20H32O4	335	203,317,129,273	-82	-30	4.84	0.2	0.5	0.5-500	0.9979
LTB3	88099-35-8	C20H34O4	337	195,122,151,319	-82	-22	5.84	0.02	0.05	0.05-500	0.99917
20-HETE	79551-86-3	C20H32O3	319	289,275,257,301	-48	-28	6.75	0.02	0.02	0.02-500	0.99728
5(S)-HpEPE	143292-98-2	C20H30O4	333	155,201,173,271	-28	-16	8.21	0.5	1	1-500	0.99792
12-HETE	71030-37-0	C20H32O3	319	179,257,135,301	-40	-22	11.18	0.1	0.2	0.2-500	0.99701
5-HEPE	83952-40-3	C20H30O3	317	115,255,299,201	-50	-17	7.75	0.01	0.02	0.02-500	0.99855
11(12)-EET	123931-40-8	C20H32O3	319	167,179,257,301	-55	-19	11.18	0.05	0.05	0.05-500	0.99725
18-HEPE	141110-17-0	C20H30O3	317	259,255,299,273,215	-49	-19	6.4	0.05	0.05	0.05-500	0.99741
LTF4	83851-42-7	C28H44N2O8S	567	171,127,351,438	-47	-30	3.91	0.1	0.1	0.1-500	0.99684
15-Oxo-ETE	81416-72-0	C20H30O3	317	113,273,139,299	-34	-22	8.71	0.05	0.05	0.05-500	0.99889

LTB4	71160-24-2	C20H32O4	335	195,273,151,317	-29	-20	4.84	0.02	0.05	0.05-500	0.99795
11,12-DiHETrE	/	C20H34O4	337	167,257,319	-49	-24	5.94	0.01	0.02	0.02-500	0.99885
5(6)-DiHETE	845673-97-4	C20H32O4	335	145,273,205,317	-64	-24	5.58	1	1	1-500	0.99762
14(15)-DiHET	/	C20H34O4	337	207,129,163,319	-40	-24	5.51	0.02	0.02	0.02-500	0.99795
15-HEPE	88852-33-9	C20H30O3	317	219,255,175,299	-75	-18	6.83	0.01	0.02	0.02-500	0.99744
8(9)-EET	/	C20H32O3	319	155,257,167,275	-44	-17	11.51	0.02	0.05	0.05-500	0.99715
19-HETE	115461-39-7	C20H32O3	319	275,231,257,301	-50	-23	6.63	0.1	0.2	0.2-500	0.99613
13-HDHA	90780-53-3	C22H32O3	343	193,281,221,325	-30	-16	8.53	0.05	0.1	0.1-500	0.99415
5(6)-EET	87173-80-6	C20H32O3	319	191,275,257,301	-35	-16	11.89	0.05	0.1	0.1-500	0.99806
Resolvin D1	872993-05-0	C22H32O5	375	141,215,233,277	-32	-22	3.4	0.02	0.02	0.02-500	0.99688
Resolvin D2	810668-37-2	C22H32O5	375	175,141,215,277	-30	-30	3.61	0.05	0.1	0.1-500	0.99573
PGE3	802-31-3	C20H30O5	349	331,313,269,233	-34	-13	3.06	0.05	0.1	0.1-500	0.99516
11-dehydro TXB2	67910-12-7	C20H32O6	367	305,349,243,161	-69	-21	3.33	0.05	0.1	0.1-500	0.99781
PGJ2	60203-57-8	C20H30O4	333	271,189,233,315	-34	-19	4.04	0.05	0.1	0.1-500	0.99731
TXB1	64626-32-0	C20H36O6	371	171,197,327	-59	-22	3.08	0.02	0.05	0.05-500	0.9955
PGD2	41598-07-6	C20H32O5	351	271,189,315,233	-61	-15	3.41	0.1	0.2	0.2-500	0.99568
PGI2	61849-14-7	C20H31O5	351	315,271,189,233	-53	-21	3.3	0.1	0.2	0.2-500	0.99157
15-deoxy-Δ12,14-PGJ2	87893-55-8	C20H28O3	315	271,203,297	-35	-23	6.66	0.02	0.05	0.05-500	0.99709
6-keto PGF1α	58962-34-8	C20H34O6	369	163,245,207,315	-25	-35	2.6	0.01	0.02	0.02-500	0.99678
8(9)-DiHET	/	C20H34O4	337	127,185,257,319	-65	-28	6.38	0.005	0.005	0.005-500	0.99684

17-HDHA	90780-52-2	C22H32O3	343	201,281,245,325	-33	-19	8.34	0.05	0.1	0.1-500	0.99362
DHA	6217-54-5	C22H32O2	327	283,299,249,309	-34	-15	16.08	0.05	0.1	0.1-500	0.9979
Lipoxin A4	89663-86-5	C20H32O5	351	115,217,235,333	-57	-21	3.62	0.01	0.02	0.02-500	0.99713
Arachidonic Acid	506-32-1	C20H32O2	303	259,205	-71	-30	16.25	0.01	0.02	0.02-100	0.99572
Maresin-1	1268720-28-0	C22H32O4	359	177,250,297,341	-60	-21	4.64	0.05	0.1	0.1-500	0.99889
20-carboxy LTB4	80434-82-8	C20H30O6	365	347,169,303,195	-39	-24	2.99	0.2	0.5	0.5-200	0.99551
LTB5	80445-66-5	C20H30O4	333	195,129,315	-19	-23	4.12	0.02	0.05	0.05-200	0.99702
6-keto PGE1	67786-53-2	C20H32O6	367	143,331,205,349	-25	-26	2.74	0.05	0.1	0.1-500	0.99594
TXB2	54397-85-2	C20H34O6	369	169,195,177,325	-24	-22	3.16	0.05	0.1	0.1-500	0.9977
PGE2	363-24-6	C20H32O5	351	271,189,315,233	-54	-21	3.41	0.02	0.05	0.05-500	0.99573
PGB2	13367-85-6	C20H30O4	333	175,235,271,315	-52	-28	4.11	0.1	0.2	0.2-500	0.99815
TXB3	71953-80-5	C20H32O6	367	169,195,177,125	-67	-21	3	0.05	0.1	0.1-500	0.99645

Table S2 Mean concentrations of each analytes in rat serum

Time (h)	Mean Concentration (ng/mL)																		
	17(18)-EpETE	19(20)-EpDPA	15-HETE	16-HETE	12-HEPE	5(6)-DiHET	14-HDHA	9-HETE	11-HEPE	5-HETE	17-HETE	LTE4	16(17)-EpDPA	20-HDHA	11-HDHA	8-HDHA	20-HETE	5-HEPE	11(12)-EET	18-HEPE
0 h	0.24	0.92	1.81	0.02	2.20	0.08	8.58	0.20	0.24	0.47	0.02	0.04	0.10	0.79	0.34	1.22	0.05	0.48	0.02	0.22
0.083 h	0.15	0.87	1.87	0.07	6.44	0.15	11.87	0.85	0.12	0.75	0.04	0.16	0.03	0.28	0.17	0.45	0.10	0.28	0.06	0.10
0.25 h	0.19	0.66	1.17	0.05	4.77	0.12	7.22	0.50	0.11	0.61	0.02	0.15	0.03	0.36	0.12	0.35	0.10	0.21	0.05	0.07
0.5 h	0.18	0.69	0.77	0.05	2.87	0.11	5.10	0.26	0.09	0.56	0.03	0.08	0.04	0.28	0.08	0.33	0.10	0.20	0.05	0.06
1 h	0.20	0.86	0.53	0.06	1.51	0.11	3.11	0.15	0.10	0.57	0.04	0.07	0.04	0.33	0.10	0.42	0.11	0.25	0.07	0.12
2 h	0.25	0.90	0.66	0.03	1.62	0.09	3.07	0.17	0.14	0.68	0.03	0.03	0.08	0.36	0.22	0.61	0.10	0.37	0.06	0.14
4 h	0.16	0.82	0.92	0.04	2.38	0.10	5.30	0.26	0.12	0.63	0.02	0.03	0.04	0.31	0.23	0.46	0.08	0.26	0.04	0.12
6 h	0.24	0.98	0.94	0.02	1.92	0.10	6.95	0.30	0.15	0.58	0.03	0.05	0.06	0.50	0.33	0.78	0.07	0.26	0.03	0.14
8 h	0.20	0.83	0.90	0.02	2.28	0.20	9.88	0.26	0.15	1.16	0.02	0.03	0.09	0.70	0.48	1.12	0.05	0.48	0.03	0.17
12 h	0.24	0.93	1.00	0.01	1.79	0.30	9.93	0.32	0.22	1.77	0.02	0.04	0.18	1.54	0.80	1.93	0.04	0.86	0.08	0.25
24 h	0.18	0.69	0.43	0.01	1.07	0.07	2.44	0.15	0.18	0.45	0.02	0.03	0.08	0.56	0.25	1.03	0.05	0.50	0.02	0.17
48 h	0.35	1.10	0.46	0.01	1.28	0.10	2.55	0.13	0.25	0.49	0.02	0.04	0.17	0.69	0.38	1.52	0.06	0.67	0.04	0.26

Time (h)	Mean Concentration (ng/mL)																	
	LTB4	11,12-DiHETrE	5(6)-DiHETE	14(15)-DiHET	15-HEPE	8(9)-EET	13-HDHA	Resolvin D2	PGE3	TXB1	PGD2	PGI2	8(9)-DiHET	17-HDHA	Lipoxin A4	TXB2	PGE2	DHA	Arachidonic Acid
0 h	0.21	0.08	1.50	0.11	0.65	0.07	0.30	2.28	0.26	0.04	0.37	0.29	0.01	2.56	0.05	2.90	0.26	280.00	64.64
0.083 h	0.16	0.30	1.00	0.34	0.24	0.16	0.22	1.39	0.21	0.18	1.08	1.20	0.03	0.91	0.04	15.86	1.08	423.56	131.13
0.25 h	0.09	0.26	0.61	0.31	0.30	0.13	0.13	1.20	0.12	0.11	0.69	0.77	0.04	0.69	0.04	8.40	0.62	448.16	153.94
0.5 h	0.05	0.23	0.40	0.25	0.23	0.10	0.11	1.11	0.17	0.06	0.51	0.53	0.03	0.46	0.03	4.60	0.48	387.05	141.47

1 h	0.04	0.32	0.52	0.32	0.20	0.12	0.10	1.20	0.20	0.03	0.34	0.29	0.04	0.36	0.05	1.99	0.34	441.33	149.49
2 h	0.03	0.17	1.01	0.17	0.31	0.13	0.17	0.99	0.13	0.02	0.30	0.25	0.02	0.55	0.03	1.24	0.20	609.71	135.80
4 h	0.08	0.15	0.50	0.15	0.24	0.09	0.19	1.39	0.10	0.06	0.47	0.58	0.02	0.58	0.04	3.59	0.49	430.50	118.78
6 h	0.06	0.09	0.72	0.11	0.22	0.09	0.26	1.70	0.11	0.08	0.40	0.32	0.01	0.90	0.05	4.67	0.40	351.46	94.57
8 h	0.06	0.08	1.29	0.12	0.29	0.10	0.33	1.48	0.14	0.04	0.18	0.21	0.01	0.97	0.06	2.67	0.18	540.94	109.29
12 h	0.05	0.09	3.08	0.10	0.37	0.21	0.52	1.54	0.18	0.03	0.13	0.17	0.01	1.05	0.05	2.33	0.18	903.65	170.55
24 h	0.04	0.05	0.94	0.06	0.23	0.05	0.22	1.43	0.21	0.04	0.26	0.27	0.01	0.56	0.03	2.35	0.23	187.04	85.62
48 h	0.03	0.06	1.98	0.06	0.37	0.10	0.38	2.25	0.40	0.04	0.26	0.26	0.01	0.85	0.03	1.79	0.23	349.07	83.74