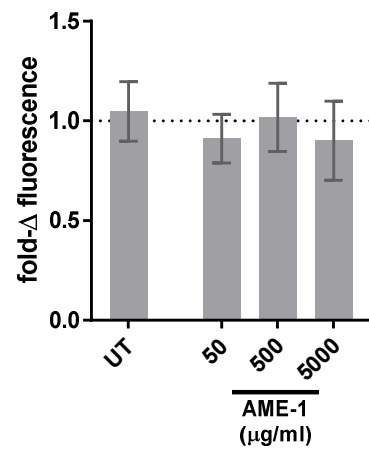


Supplementary Figure S1. ESI-MS positive ion scanning spectra for GABA (a) and muscimol (b); Single ion monitoring mode chromatograms of AME-1 spiked with GABA (c) and muscimol (d); calibration curve of GABA (e) and muscimol (f) ($n=3$).



Supplementary Figure S2. Effect of AME-1 on ROS generation. HMC3 cells were treated with AME-1 and indicated concentrations for 24 hr and ROS generation was measured as indicated in Materials and Methods. Data were analyzed by one-way ANOVA with tukey post-hoc analysis and are presented as mean \pm SEM of n=3.

Supplementary Table S1. List of metabolite composition of AME-1 as analyzed by NMR

	Compound Name	Concentration (mM)		Compound Name	Concentration (mM)
1	2-Aminoadipate	0.1086	43	Gluconate	0.5847
2	2-Hydroxy-3-methylvalerate	0.0429	44	Glucose	0.3952
3	2-Hydroxybutyrate	0.0989	45	Glucose-6-phosphate	0.1081
4	2-Hydroxyglutarate	0.1484	46	Glutamine	0.087
5	2-Hydroxyvalerate	0.0346	47	Glycerol	0.3792
6	2-Methylglutarate	0.0096	48	Glycine	0.0797
7	2-Octenoate	0.0815	49	Guanidoacetate	0.4524
8	2-Oxocaproate	0.0387	50	Guanosine	0.0296
9	2-Oxoglutarate	0.0437	51	Histidine	0.0133
10	2-Phenylpropionate	0.0226	52	Homoserine	0.2914
11	2-Phosphoglycerate	0.278	53	Inosine	0.013
12	3,5-Dibromotyrosine	0.0077	54	Isocitrate	0.1194
13	3-Aminoisobutyrate	0.05	55	Isoleucine	0.0472
14	3-Hydroxy-3-methylglutarate	0.0225	56	Lactate	0.6652
15	3-Methylglutarate	0.0564	57	Lactose	0.0587
16	4-Aminobutyrate	0.0030	58	Leucine	0.0886
17	Acetate	0.07	59	Lysine	0.0366
18	Adenosine	0.0279	60	Malate	0.6452
19	Alanine	0.3031	61	Malonate	0.0404
20	Arabinitol	0.124	62	Mannitol	0.146
21	Arginine	0.138	63	Methionine	0.015
22	Aspartate	0.1507	64	Muscimol	0.044
23	Azelate	0.0289	65	myo-Inositol	0.0977
24	Betaine	0.0249	66	N-Acetylcysteine	0.0367
25	Biotin	0.0959	67	Nicotinate	0.0163
26	Butyrate	0.0186	68	O-Phosphocholine	0.0966
27	Carnitine	0.0531	69	Ornithine	0.0722
28	Choline	0.1141	70	Phenylacetate	0.0155
29	cis,cis-Muconate	0.0194	71	Phenylalanine	0.0651
30	Citraconate	0.0158	72	Proline	0.1891
31	Citrate	0.0878	73	Propylene glycol	0.0106
32	Cytosine	0.0128	74	Pyroglutamate	0.6105
33	dTTP	0.0243	75	Serine	0.2087
34	Ethylene glycol	0.1265	76	Succinate	0.2554
35	Formate	0.0207	77	Tartrate	0.0253
36	Fucose	0.0492	78	Taurine	0.0917
37	Fumarate	0.3199	79	Threonine	0.1179
38	Galactarate	0.038	80	Trehalose	1.3831
39	Galactonate	0.0486	81	Tyrosine	0.0224
40	Galactose	0.0366	82	Uridine	0.0459
41	Glucarate	0.1183	83	Valine	0.0701
42	Glucitol	0.4223	84	β-Alanine	0.0201