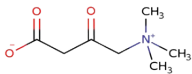
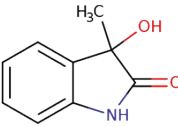
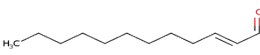
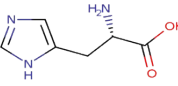
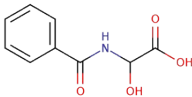
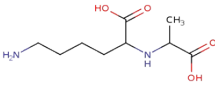
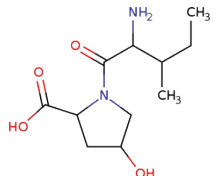
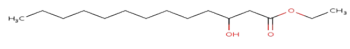
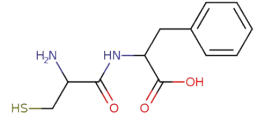
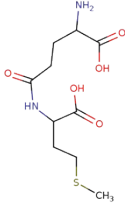
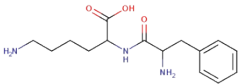
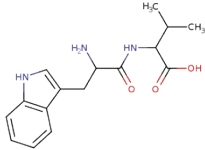
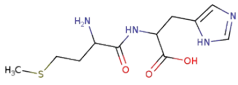
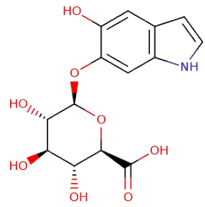
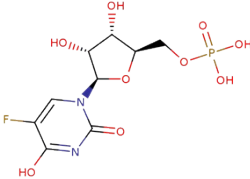
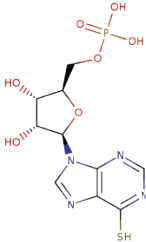


S1 Table: The information of reference standards

Name	Formula	Chemical structure	Mass	Rt (min)	Source
3-Dehydrocarnitine	C ₇ H ₁₄ NO ₃		160.13	3.18	http://www.hmdb.ca/metabolites/HMDB12154
3-Methyldioxyindole	C ₉ H ₉ NO ₂		164.067	0.87	http://www.hmdb.ca/metabolites/HMDB04186
2-Dodecenal	C ₁₂ H ₂₂ O		183.1742	9.95	http://www.hmdb.ca/metabolites/HMDB31020
Histidine	C ₆ H ₉ N ₃ O ₂		194.03	0.86	http://www.hmdb.ca/metabolites/HMDB00177
Alpha-Hydroxyhippuric acid	C ₉ H ₉ NO ₄		196.0167	0.87	http://www.hmdb.ca/metabolites/HMDB0002404
L-Lysopine	C ₉ H ₁₈ N ₂ O ₄		219.138	8.06	http://www.hmdb.ca/metabolites/HMDB33675
Isoleucyl-Hydroxyproline	C ₁₁ H ₂₀ N ₂ O ₄		245.164	11.42	http://www.hmdb.ca/metabolites/HMDB28908
Ethyl 3-hydroxytridecanoate	C ₁₅ H ₃₀ O ₃		259.2823	10.14	http://www.hmdb.ca/metabolites/HMDB59866
Cysteiny-Phenylalanine	C ₁₂ H ₁₆ N ₂ O ₃ S		269.0993	9.22	http://www.hmdb.ca/metabolites/HMDB28782
N-gamma-L-Glutamyl-L-methionine	C ₁₀ H ₁₈ N ₂ O ₅ S		279.0722	7.12	http://www.hmdb.ca/metabolites/HMDB34367

Phenylalanyl-Lysine	$C_{15}H_{23}N_3O_3$		294.2039	10.03	http://www.hmdb.ca/metabolites/HMDB29000
Tryptophyl-Valine	$C_{16}H_{21}N_3O_3$		304.17	10.37	http://www.hmdb.ca/metabolites/HMDB29096
Methionyl-Histidine	$C_{11}H_{18}N_4O_3S$		309.13	10.37	http://www.hmdb.ca/metabolites/HMDB28975
Dihydroxy-1H-indole glucuronide I	$C_{14}H_{15}NO_8$		326.0868	4.93	http://www.hmdb.ca/metabolites/HMDB59997
5-Fluorouridine monophosphate	$C_9H_{12}FN_2O_9P$		343.012	10.88	http://www.hmdb.ca/metabolites/HMDB60397
6-Thioinosine-5'-monophosphate	$C_{10}H_{13}N_4O_7PS$		365.01	8.74	http://www.hmdb.ca/metabolites/HMDB60416
