

Table 1

Lipid content in exosomes and enrichment from the originating cells.

Lipids	PC-3 cells [34]		PC-3 cells + HG [43]		Oli-neu cells [35]		B-lymphocytes [36]		Mast cells [37]		Dendritic cells [37]		Reticulocytes [38]		Prosta. ^a 100 nm [39]	Prosta. ^a 50 nm [39]	Urine [40]	Nematodes [41]
	%	Factor	%	Factor	% ^b	Factor	%	Factor	% ^c	Factor	% ^{c,d}	Factor	%	Factor	%	%	%	% ^e
CHOL	43.5	2.3	59	1.7	43	2.3	42.1	3.0	15	1.0	?	?	47	1.03	54.8	54.1	63	7
SM	16.3	2.4	9.1	2.0	8.2	1.5	23.0	2.3 ^f	12	2.8	20	2.2	8.4 ^f	1.31	28.6	14.3	11.7	3
PC	15.3	0.31	10.8	0.33	26.7	0.67	(20.3) ^g	(0.76) ^g	28	0.66	26	0.6	23.5	1.03	2.3	1.3	2.7	4
PS	11.7	2.1	6.9	1.2	14.9	3.0	(20.3) ^g	(0.76) ^g	(16) ^g	(1.2) ^g	(19) ^g	(1.6) ^g	5.9	0.92	7.1	5.4	13.2	15
PE	5.8	0.55	1.1	0.21	10.9	1.0	(14.6) ^g	(0.7) ^g	24	1.08	26	1.13	12.7	0.84	0.6	0.3	<LOQ	13
PE O/P	3.3	1.2	4.7	0.81			(14.6) ^g	(0.7) ^g									4.6	47
DAG	1.5	1.5	1.1	0.92													0.1	
PC O/P	0.81	0.40	0.7	0.28														8
HexCer	0.76	3.8	2.3	2.1	?	2.0									5.6	23.3	1.9	
Cer	0.32	1.3	0.7	1.2	?	3.3											0.1	
PG	0.17	0.17	0.1	0.07														
PA	0.16	1.8	0.1	0.33			(20.3) ^g	(0.76) ^g										
PI	0.13	0.13	0.3	0.16			(20.3) ^g	(0.76) ^g	(16) ^g	(1.2) ^g	(19) ^g	(1.6) ^g	2.4	1.1	1.1	1.3		
LacCer	0.12	3.0	0.7	1.8													0.8	
LysoPI	0.09	2.3	-	-														
LysoPE	0.09	1.3	-	-														
CE	0.08	0.38	-	-														0.3
Gb3	0.02	2.0 ^h	-	-														1.1
Out/In	1.47	1.49			1.35	?			1.15		1.22		1.52		4.1	5.6	1.03	0.20
Lipid analysis	MS	MS			MS	TLC			TLC/ GLC		TLC/ GLC		TLC		LC-MS	LC-MS	MS	MS
Exosome prep. ⁱ	SFM + SUC	SFM + SUC			SFM + SUC + SG	uFCS + SUC + SG + immunocapture			uFCS + SUC		uFCS + SUC		uFCS + SUC		SUC + SEC + SG	SUC + SEC + SG	SUC	SFM + SUC

%; Percent of total lipid quantified.

Factor: Factor of enrichment from cells to exosomes.

Out/In: Sum of sphingolipids and lipids with the phosphocholine head group divided by all other lipids reported (except CHOL).

LOQ: Limit of quantification.

^a Prosta = Prostatomes.

^b These data are recalculated by assuming same level of CHOL as in [34]; the absolute amounts of CHOL, Cer and HexCer were not reported.

^c Recalculated from their data.

^d CHOL not reported; the sum for the other lipid classes is 100% (including LysoPC not included in this table).

^e Recalculated from their data; lyso ethers and lyso acyl lipids are not shown.

^f Sum of SM and the ganglioside GM3.

^g Sum for all classes shown in parentheses and having the same numbers.

^h Enrichments of other GSLs (GM1, GM2, GM3 and GD1) are shown in Fig. 1; due to lack of standards these GSLs could not be quantified as the other lipid classes.

ⁱ Exosome prep.: Methods used to isolate the exosome preparations. SFM: serum free medium; SUC: sequential centrifugation; SG: sucrose gradient; uFCS: ultracentrifuged fetal calf serum; SEC: size exclusion chromatography.

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