

S2. Values of minimal (min) and maximal (max) relative ion intensities found among the lipid ions in spectra, and percentage (%) of the samples presenting each m/z from attributed phospholipids and triacylglycerols detected in positive MALDI-MS mass spectra of single oocytes from human (*Homo sapiens*) oocytes, bovine (*Bos taurus*) oocytes, bovine in vivo-derived embryos (blastocysts), sheep (*Ovis aries*) oocytes, fish (*Mugil spp.*) oocytes, and ant (*Solenopsis spp.*) embryos.

m/z	human oocytes (N=10)			bovine oocytes (N=6)			bovine embryos (N=8)			sheep oocytes (N=6)			fish ova (N=9)			ant embryos (N=6)		
	min	max	%	min	max	%	min	max	%	min	max	%	min	max	%	min	max	%
703.5	14.3	50.1	100.0	n.d.	43.4	66.7	n.d.	52.6	75.0	17.0	45.7	100.0	-	-	-	-	-	-
723.5	n.d.	39.5	90.0	28.5	34.9	100.0	n.d.	40.3	75.0	n.d.	32.2	66.7	-	-	-	-	-	-
725.5	n.d.	38.8	90.0	18.4	30.4	100.0	47.6	98.5	100.0	n.d.	33.0	83.3	-	-	-	-	-	-
731.5	-	-	-	-	-	-	-	-	-	n.d.	42.8	83.3	-	-	-	-	-	-
732.5	28.5	44.9	100.0	n.d.	28.6	66.7	n.d.	28.0	37.5	-	-	-	11.3	18.0	100.0	-	-	-
734.6	-	-	-	n.d.	34.5	83.3	n.d.	20.0	25.0	-	-	-	-	-	-	-	-	-
753.6	14.8	43.3	100.0	-	-	-	-	-	-	n.d.	43.2	83.3	-	-	-	-	-	-
754.6	27.4	45.4	100.0	n.d.	30.2	83.3	n.d.	22.9	37.5	-	-	-	8.2	23.3	100.0	-	-	-
756.6	-	-	-	n.d.	32.3	83.3	n.d.	18.6	25.0	-	-	-	n.d.	20.2	77.8	-	-	-
758.6	41.2	69.6	100.0	n.d.	29.5	66.7	n.d.	28.35	50.0	-	-	-	n.d.	13.5	33.3	n.d.	25.4	33.3
760.6	76.3	100.0	100.0	72.8	100.0	100	95.1	61.26	100.0	88.9	100.0	100.0	20.1	36.4	100.0	n.d.	43.1	33.3
762.6	n.d.	17.5	30.0	n.d.	20.2	66.7	n.d.	25.3	75.0	n.d.	21.6	50.0	-	-	-	-	-	-
772.6	-	-	-	-	-	-	-	-	-	-	-	-	n.d.	13.4	44.4	-	-	-
780.6	34.8	62.9	100.0	v	24.1	66.7	n.d.	21.5	37.5	-	-	-	30.0	39.1	100.0	n.d.	28.7	33.3
782.6	69.6	100.0	100.0	89.6	100.0	100	52.5	87.3	100.0	94.6	100.0	100.0	21.4	46.0	100.0	n.d.	55.3	66.6
784.6	n.d.	31.8	90.0	n.d.	29.7	83.3	n.d.	33.9	75.0	n.d.	30.3	83.3	n.d.	14.1	33.3	n.d.	53.6	50.0
786.6	n.d.	33.0	80.0	n.d.	23.6	50.0	47.6	100.0	100.0	-	-	-	n.d.	18.2	88.9	n.d.	100.0	66.7
788.6	n.d.	31.2	80.0	-	-	-	63.6	100.0	100.0	n.d.	23.3	66.7	n.d.	12.4	44.4	n.d.	48.7	33.3
802.6	-	-	-	-	-	-	-	-	-	-	-	-	19.1	35.2	100.0	-	-	-
804.6	-	-	-	-	-	-	-	-	-	n.d.	18.7	33.3	18.0	24.9	100.0	n.d.	23.4	50.0
806.6	n.d.	18.3	20.0	-	-	-	-	-	-	-	-	-	79.6	100.0	100.0	n.d.	51.7	66.7
808.6	n.d.	28.5	60.0	n.d.	22.0	50.0	45.0	81.0	100.0	n.d.	27.6	33.3	40.2	50.6	100.0	n.d.	90.0	66.7
810.6	n.d.	27.0	70.0	-	-	-	56.8	100.0	100.0	n.d.	28.3	83.3	n.d.	18.1	88.9	n.d.	39.9	33.3
828.6	-	-	-	-	-	-	-	-	-	-	-	-	60.4	100.0	100.0	-	-	-
830.6	-	-	-	-	-	-	-	-	-	-	-	-	26.1	43.6	100.0	-	-	-
832.6	-	-	-	-	-	-	-	-	-	-	-	-	24.5	31.7	100.0	-	-	-
834.6	-	-	-	-	-	-	n.d.	17.4	37.5	-	-	-	24.9	32.5	100.0	-	-	-
836.6	-	-	-	-	-	-	n.d.	22.4	25.0	-	-	-	n.d.	15.4	55.5	-	-	-
851.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	n.d.	18.2	33.3
853.7	-	-	-	-	-	-	-	-	-	-	-	-	n.d.	16.8	55.5	23.4	40.5	100.0
855.7	-	-	-	n.d.	28.2	50.0	-	-	-	-	-	-	9.0	14.4	100.0	21.9	44.4	100.0
856.6	-	-	-	-	-	-	n.d.	45.9	50.0	-	-	-	17.5	28.9	100.0	-	-	-
877.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	n.d.	44.5	66.7
879.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40.5	100.0	100.0
881.7	-	-	-	n.d.	26.4	33.0	-	-	-	-	-	-	-	-	-	70.2	100.0	100.0
883.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32.8	58.8	100.0
895.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	n.d.	68.6	83.3
897.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.3	64.1	100.0
899.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	n.d.	34.5	66.7
901.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	n.d.	20.4	50.0
903.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	n.d.	56.2	66.7
905.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.0	100.0	100.0
907.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48.4	100.0	100.0
909.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41.6	55.8	100.0
911.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	n.d.	25.4	83.3
919.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	n.d.	42.0	66.7
921.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	n.d.	79.4	66.7
923.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.6	78.3	83.3
925.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.3	42.9	83.3

n.d.: not detected