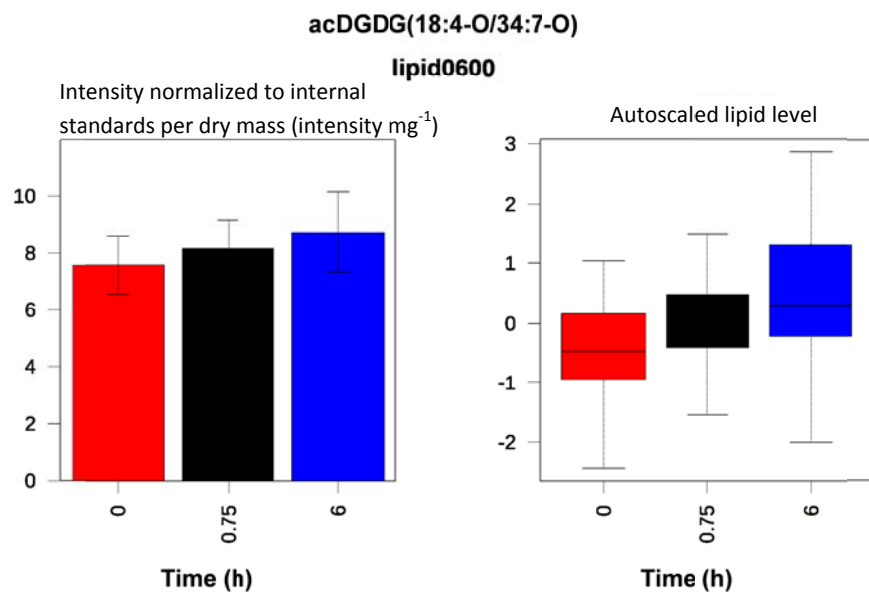
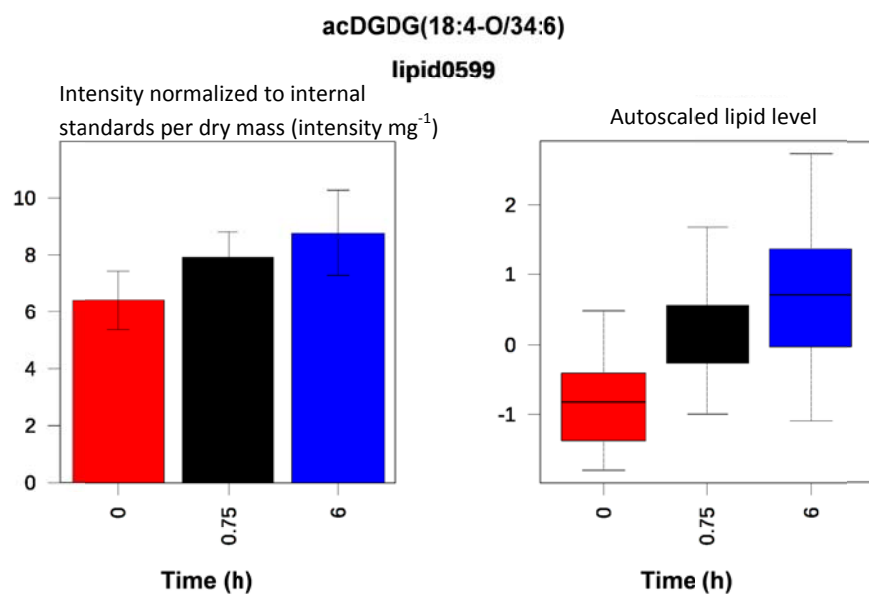


Figure S4.5 Levels of lipids as a function of wounding treatment. Leaves 6, 7, and 8 were harvested and extracted from unwounded plants (indicated as 0 h) and plants that had been wounded. Times of harvest after wounding are 0.75 h (45 min) and 6 h. Lipids were measured by direct-infusion ESI triple quadrupole MS, using an MRM method as described in Experimental Procedures. Lipids are indicated by a “lipidnumber”, in the form lipid####, which corresponds to the specific analytical conditions (MRM mode, intact ion m/z and fragment m/z) used in the measurement. Also indicated is a (putative) assignment or assignments of class and fatty acyl composition. In some cases the assignments are quite certain, in other cases, less so; current evidence for the identifications is shown in Table S4.2.

For each set of measurements, two plots are shown. Metabolanalyst (Xia et al., 2009; 2012) was used to generate the plots. The left plot shows mass spectral intensity, normalized to internal standards as described in Experimental Procedures. The error bars indicate the standard deviation of samples at each time point ($n = 31$). On the right is a box and whisker plot based on the autoscaled data. The box indicates the middle 50% of the data (25th-75th percentile). The line within the box indicates the median. The error bars, i.e., the “whiskers”, extend to the last data point or 1.5 times the height of the box from the median, whichever is greater. If there are points beyond the whiskers, these outlier points are indicated explicitly with open circles.

Figure S4.5 table of contents:

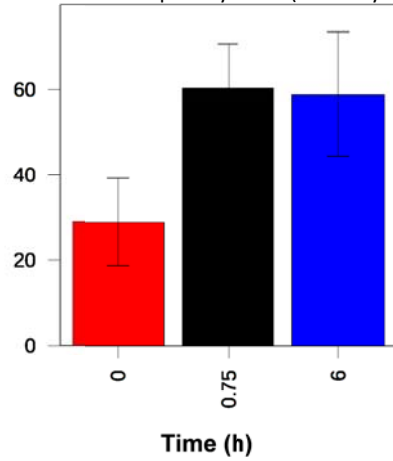
Lipid class	Pages
acDGDG	3
acMGDG	5
acPG	34
DAG	35
DGDG	38
DGMG	48
GIPC	50
GlcCer	51
LPC	53
LPE	55
MGDG	57
MGMG	75
PA	77
PC	82
PE	96
PG	111
PI	120
PS	121
SQDG	123
Sterol derivatives	124
TAG	135
TeGDG	137
TrGDG	138



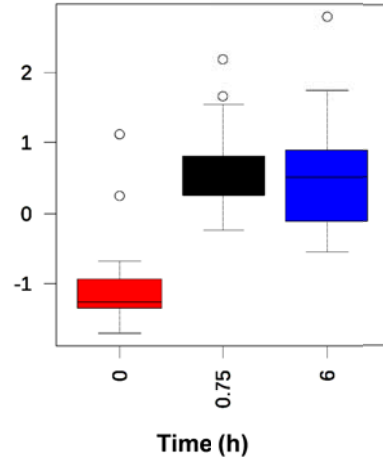
acDGDG(18:4-O/34:8-2O) or acDGDG(18:4-O/36:6)

lipid0601

Intensity normalized to internal standards per dry mass (intensity mg^{-1})



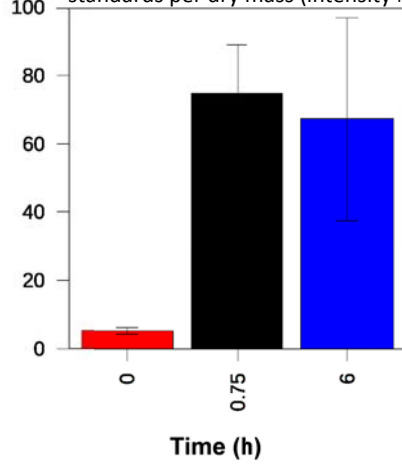
Autoscaled lipid level



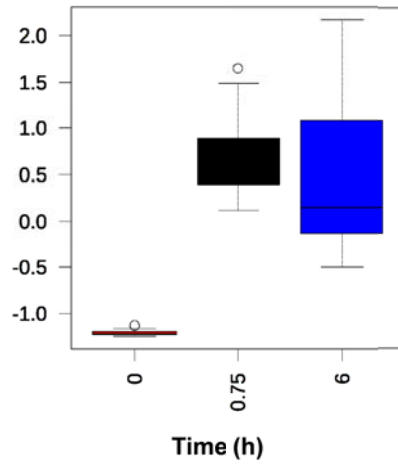
acDGDG(18:4-O/36:8-2O)

lipid0603

Intensity normalized to internal standards per dry mass (intensity mg^{-1})



Autoscaled lipid level



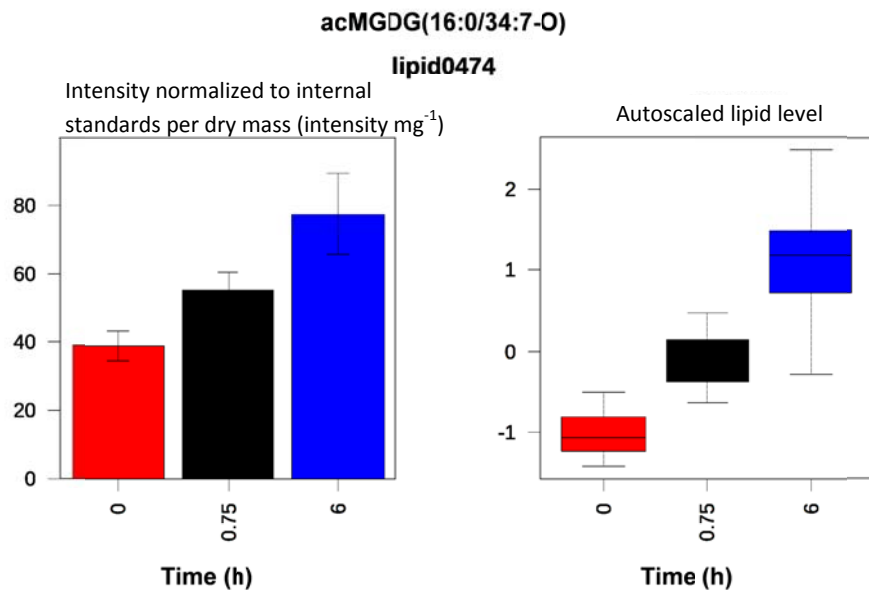
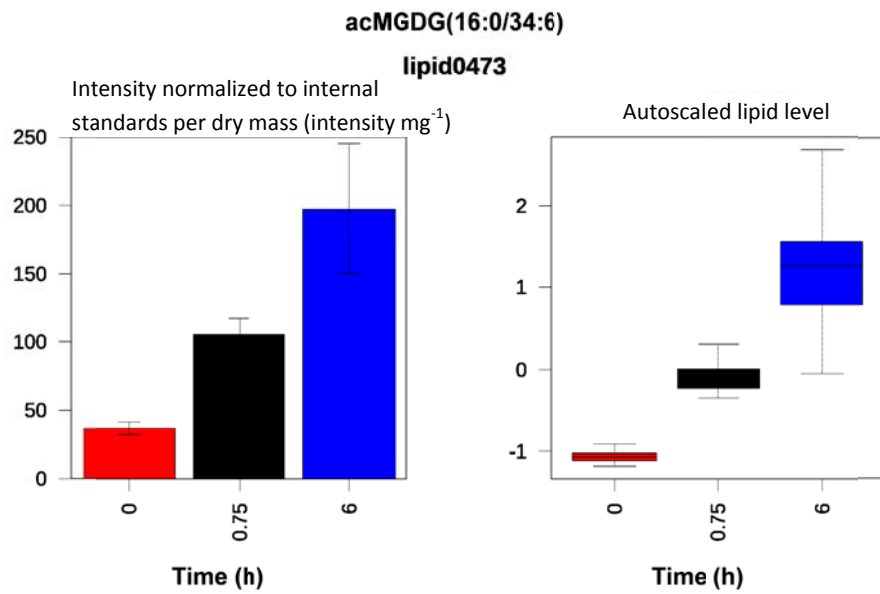
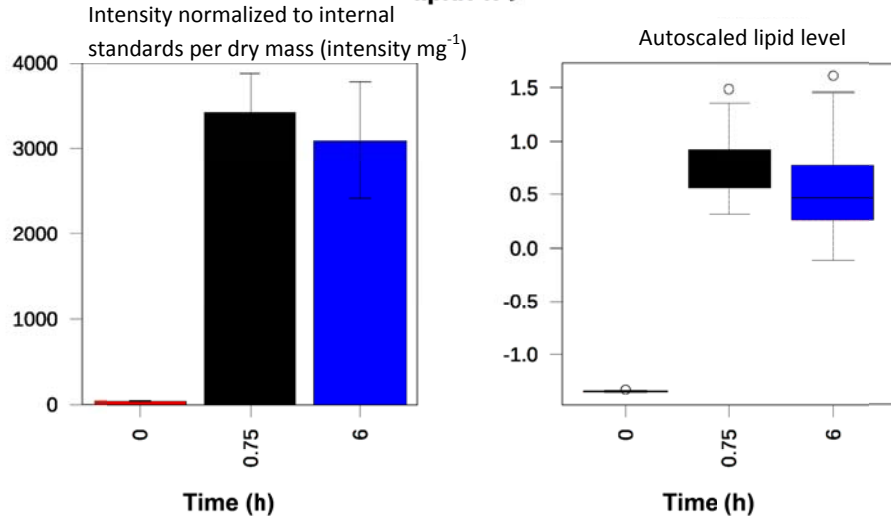


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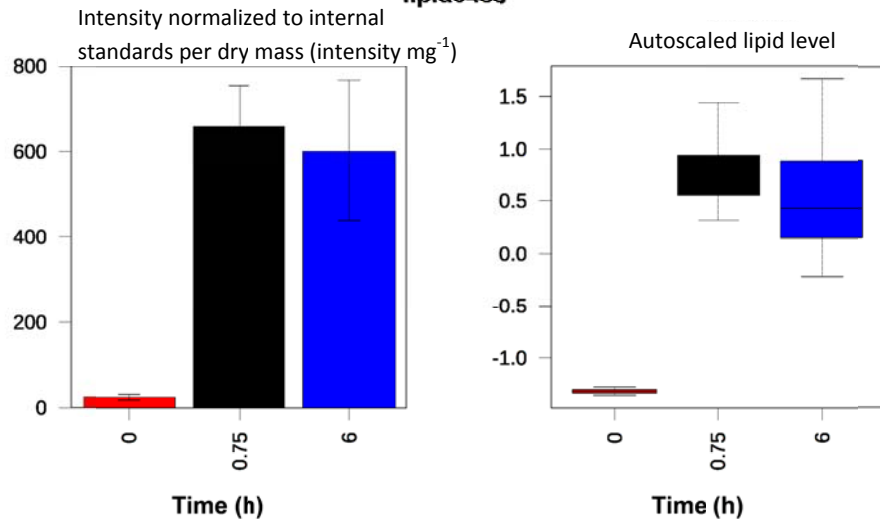
acMGDG(16:0/34:8-2O) or acMGDG(16:0/36:6)

lipid0476



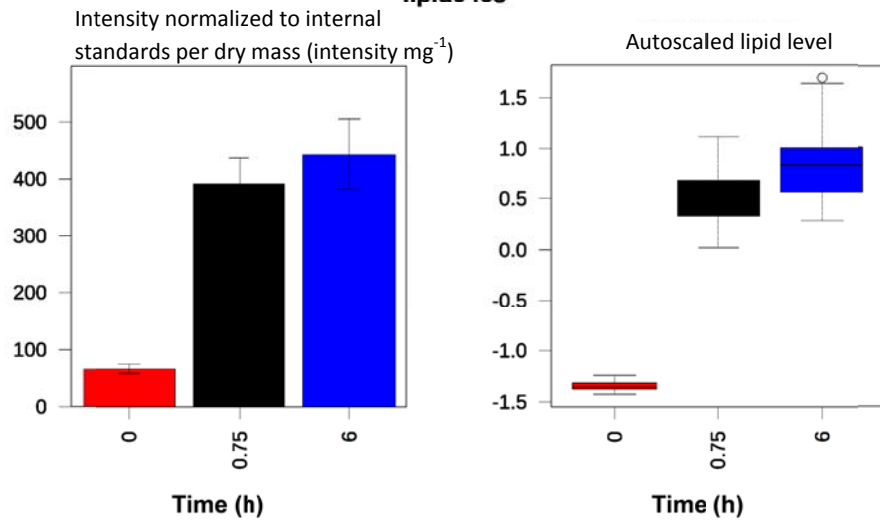
acMGDG(16:0/36:8-2O)

lipid0483



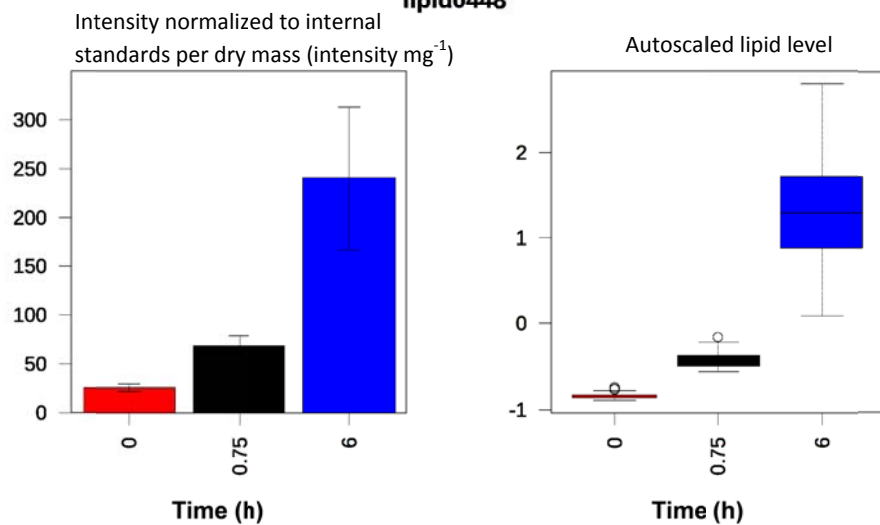
acMGDG(16:1/34:8-2O) or acMGDG(16:1/36:6)

lipid0468



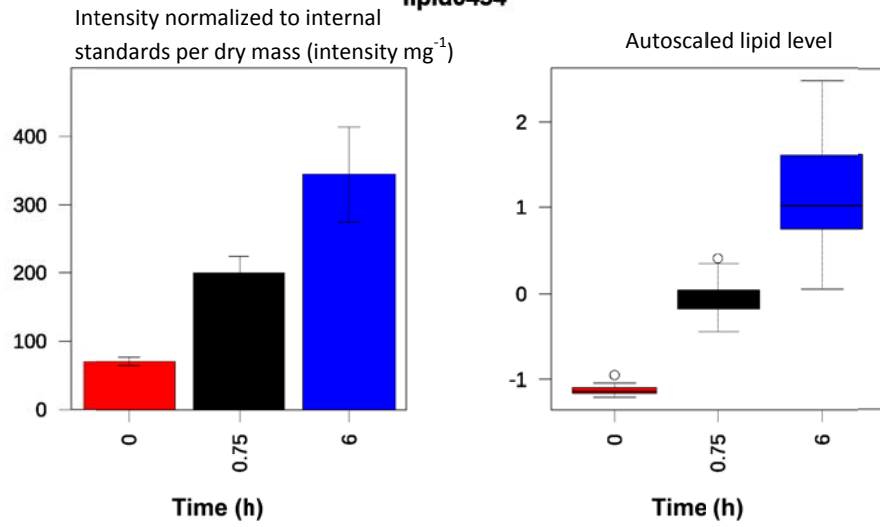
acMGDG(16:3/34:6)

lipid0448



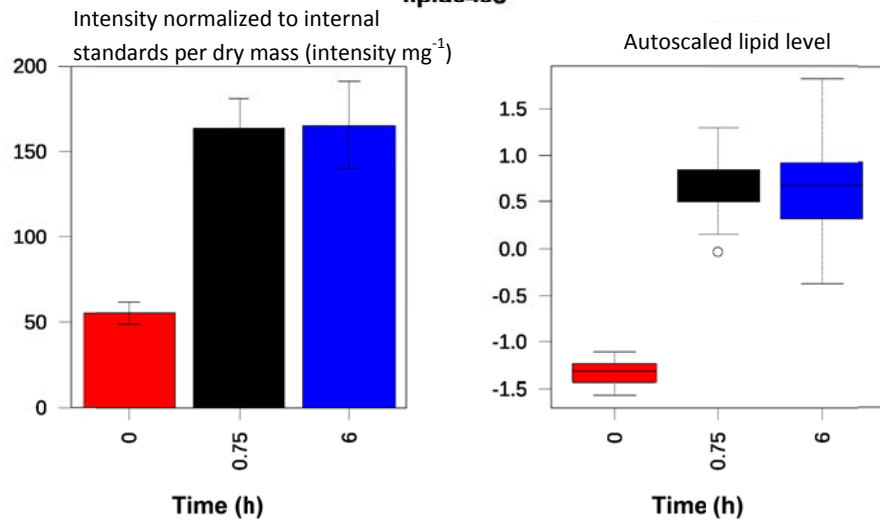
acMGDG(16:3/34:8-2O) or acMGDG(16:3/36:6)

lipid0454



acMGDG(16:3-O/34:8-2O) or acMGDG(16:3-O/36:6)

lipid0498



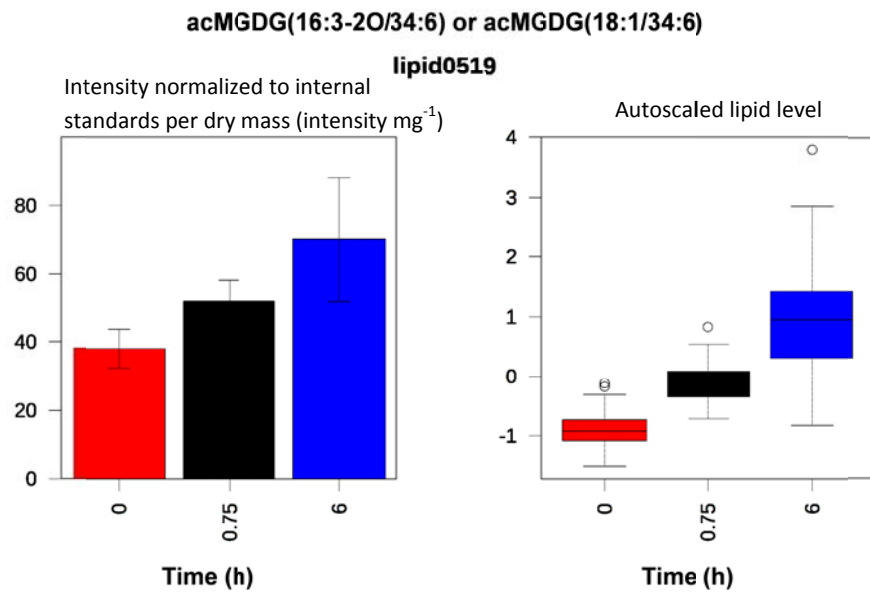
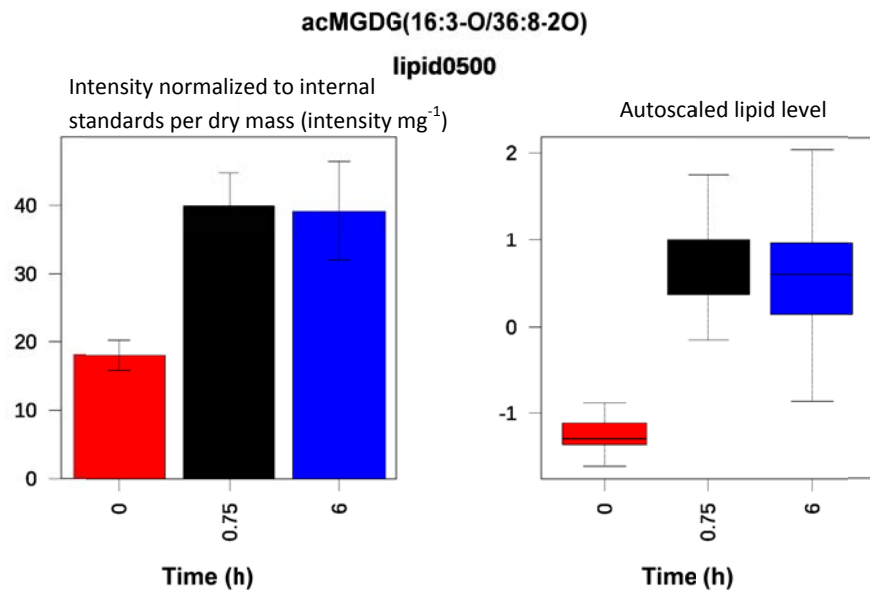
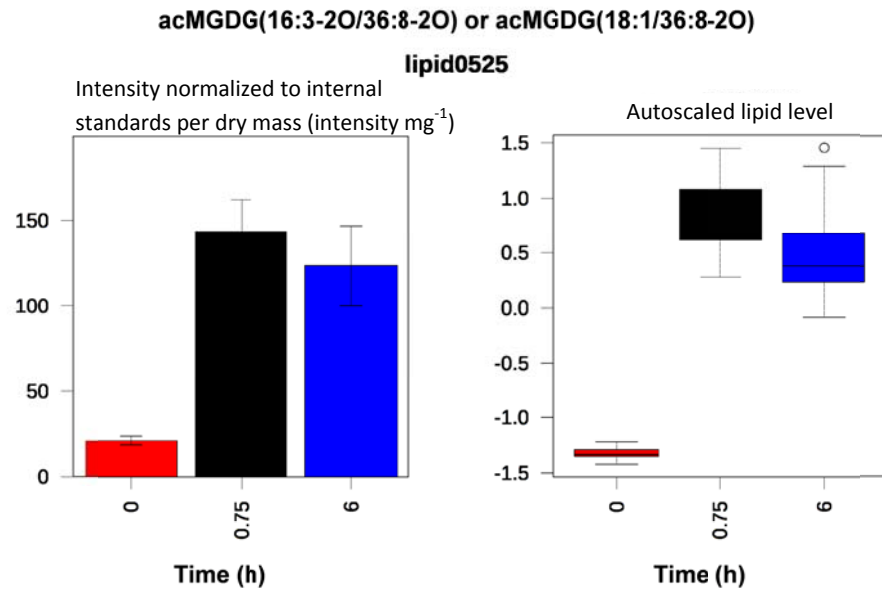
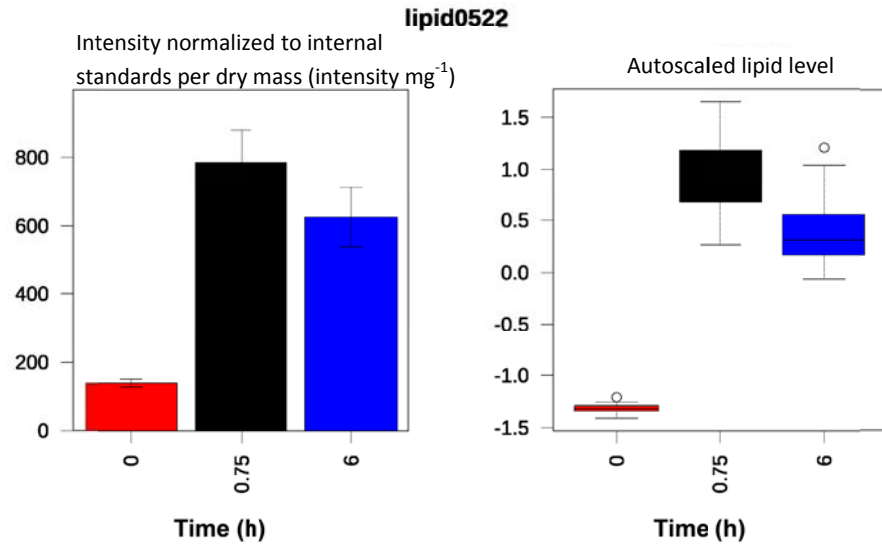


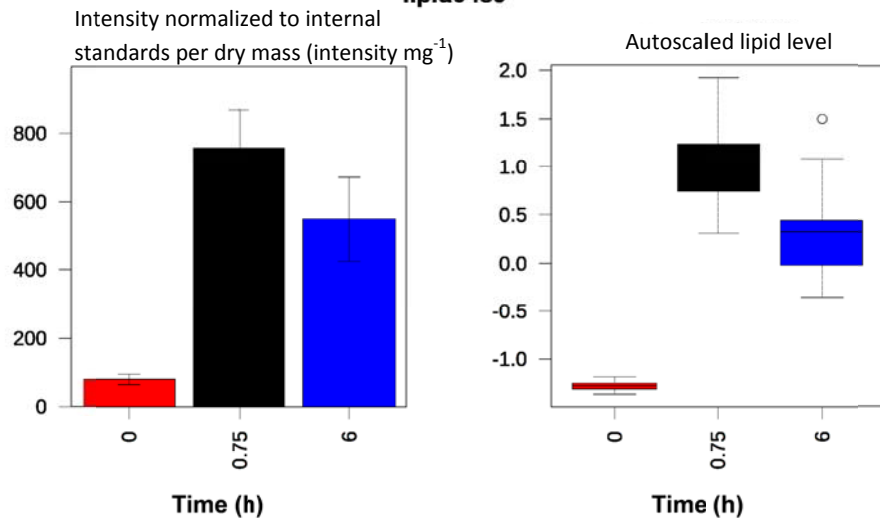
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acMGDG(16:3-2O/34:8-2O) or acMGDG(16:3-2O/36:6) or acMGDG(18:1/34:8-2O) or acMGDG(18:1/36:6)



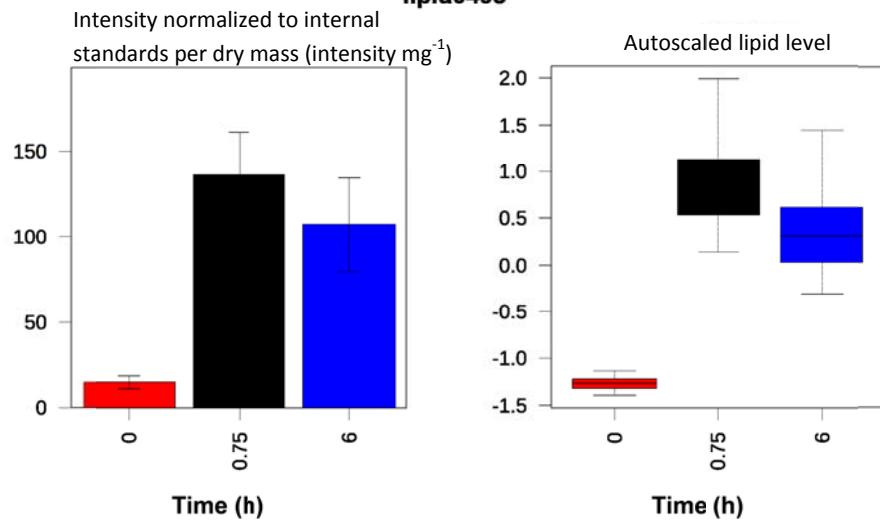
acMGDG(16:4-O/34:8-2O) or acMGDG(16:4-O/36:6)

lipid0489



acMGDG(16:4-O/36:8-2O)

lipid0495



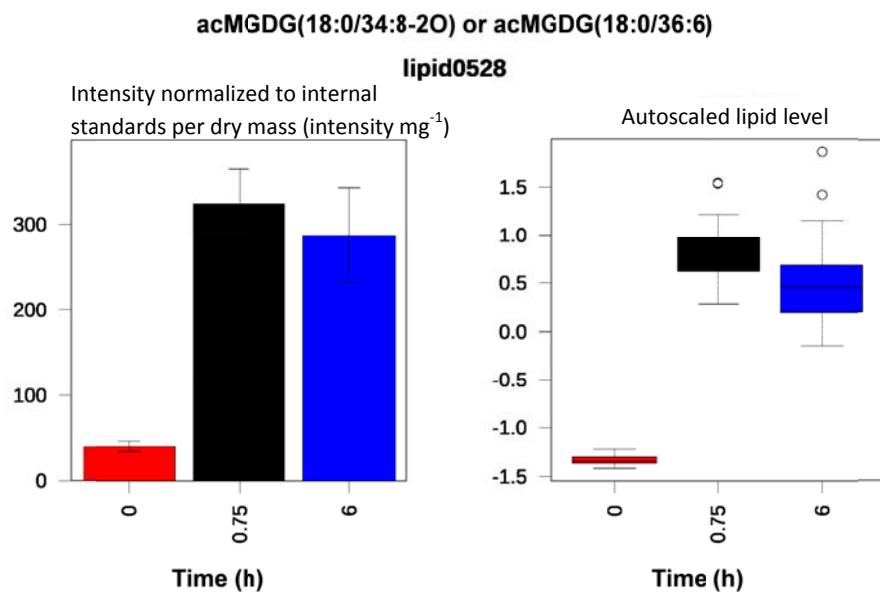
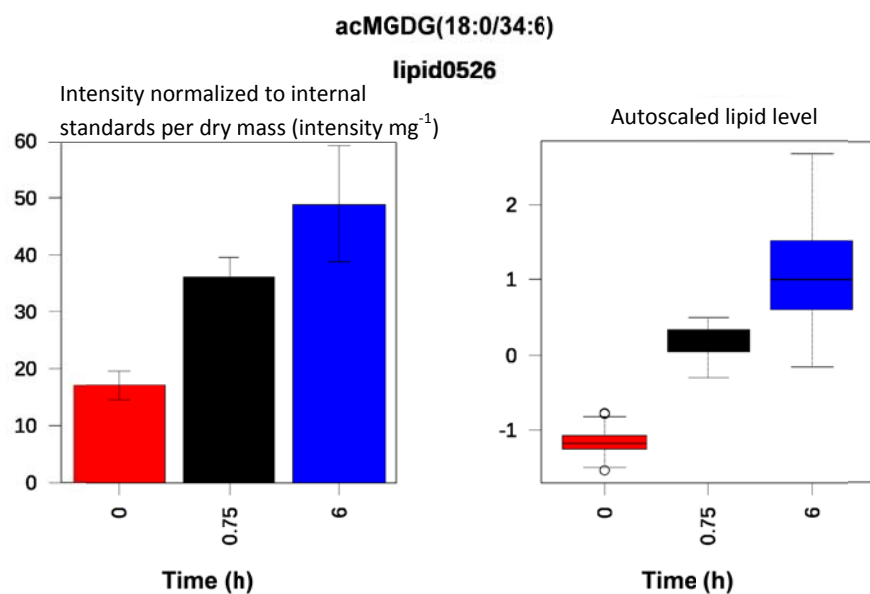
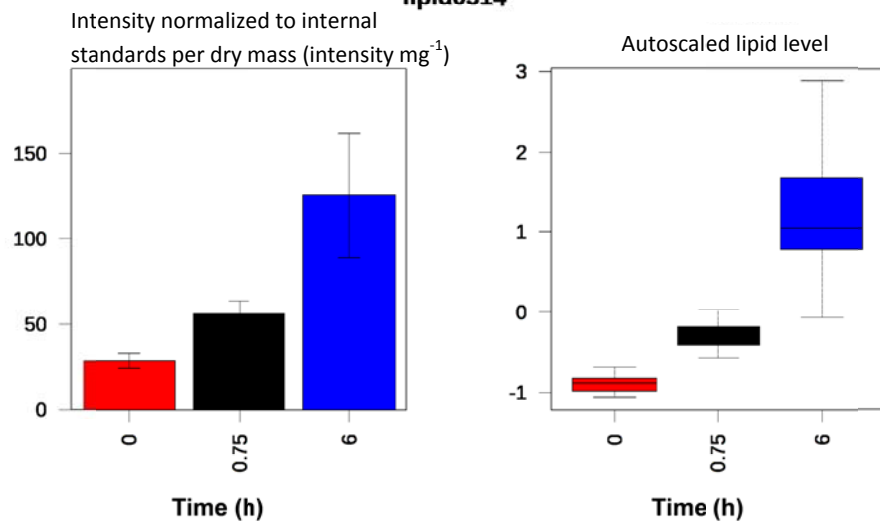


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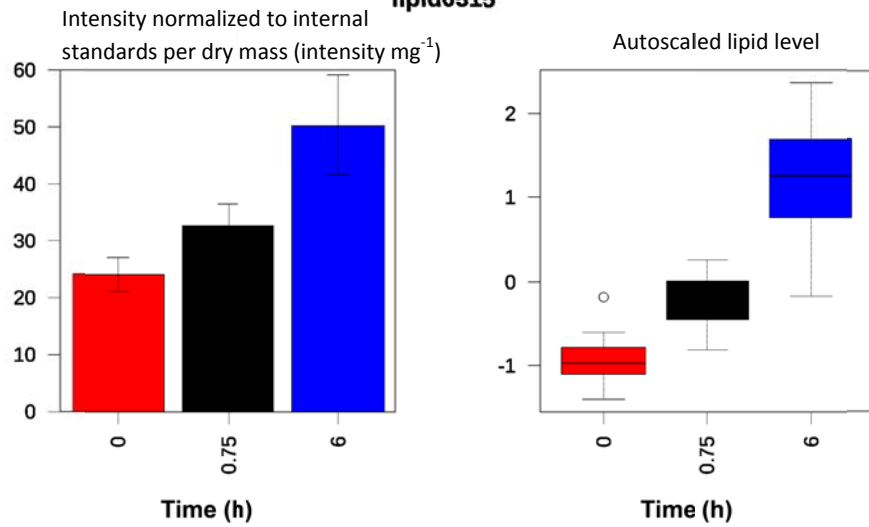
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lipid0514



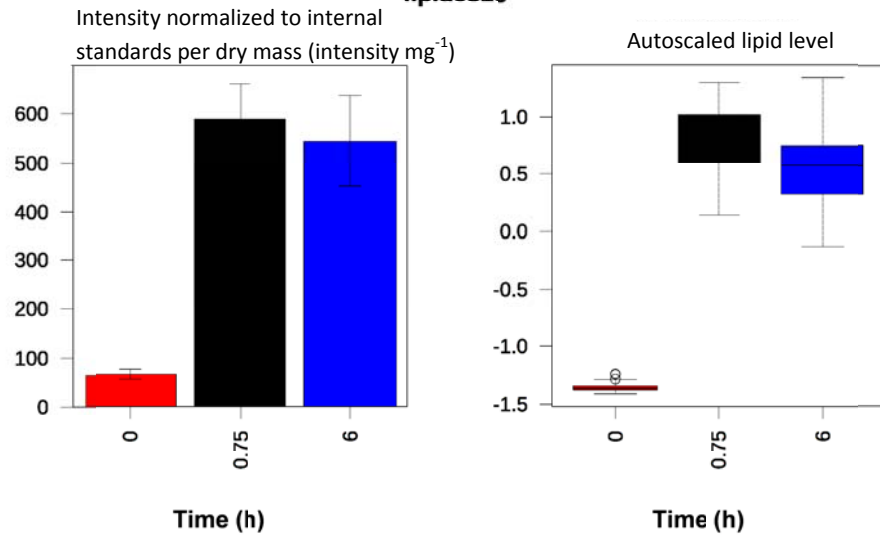
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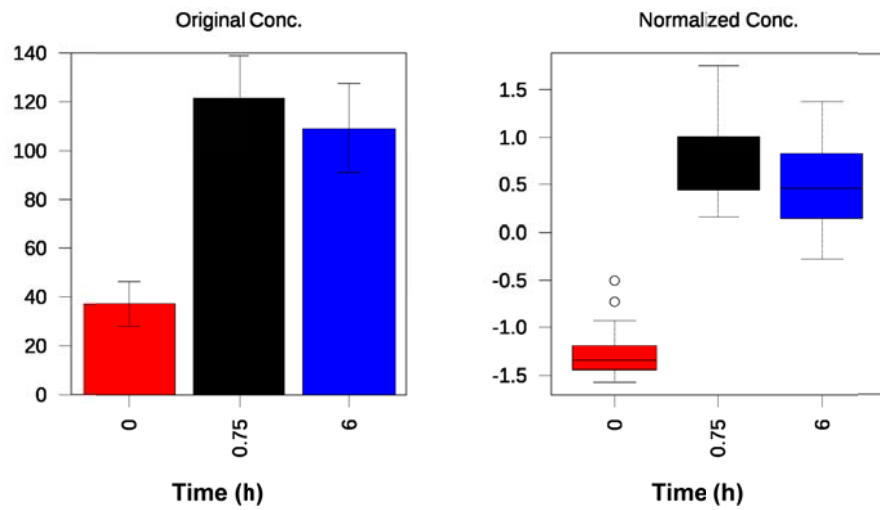
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lipid0516



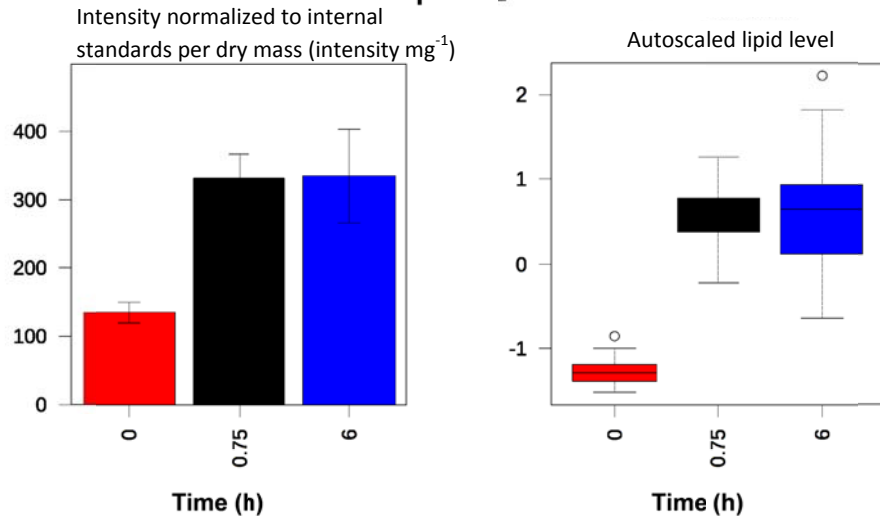
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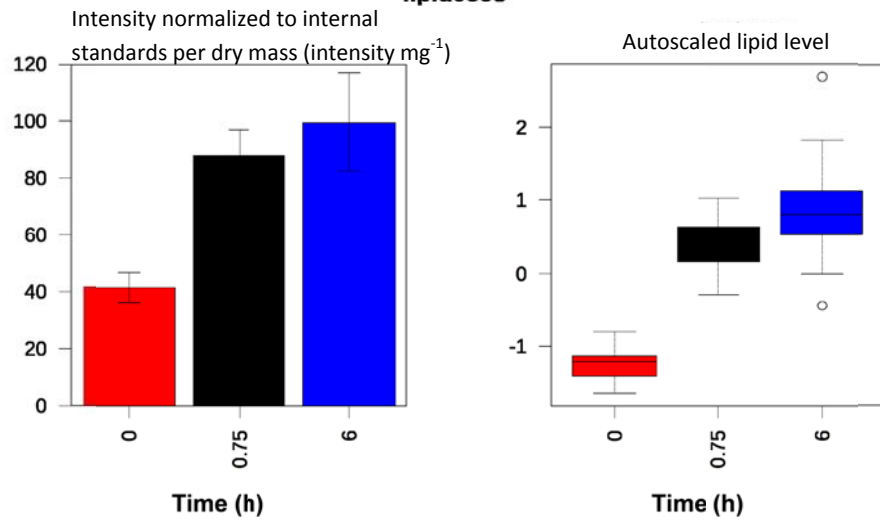
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lipid0551



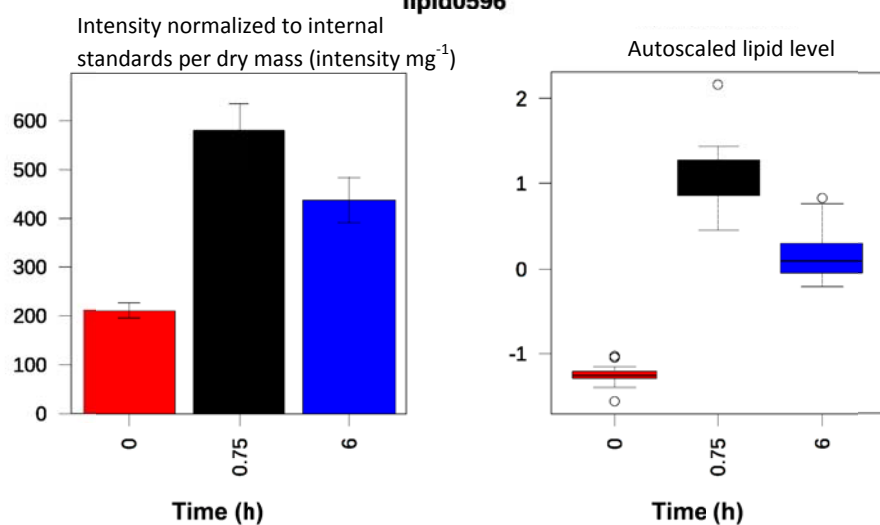
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lipid0553



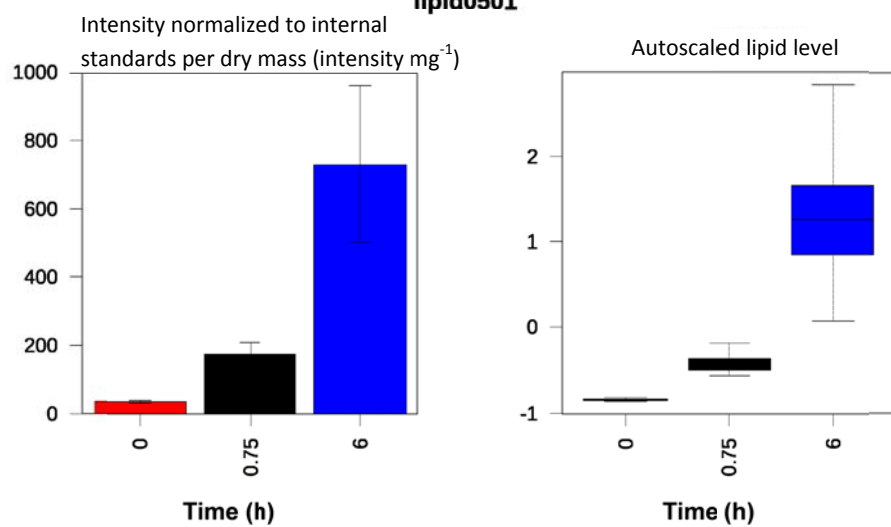
acMGDG(18:2-3O/34:8-2O) or acMGDG(18:2-3O/36:6)

lipid0596



acMGDG(18:3/34:6)

lipid0501



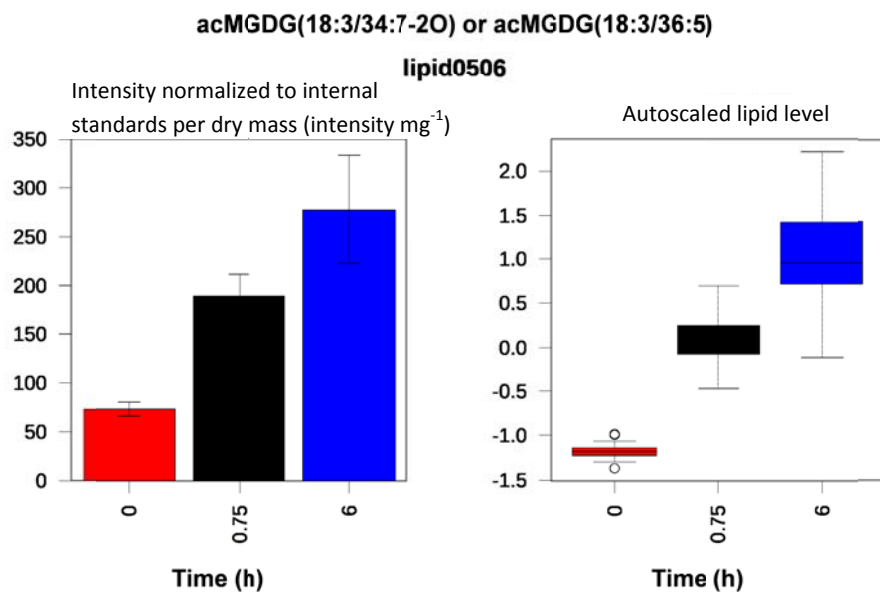
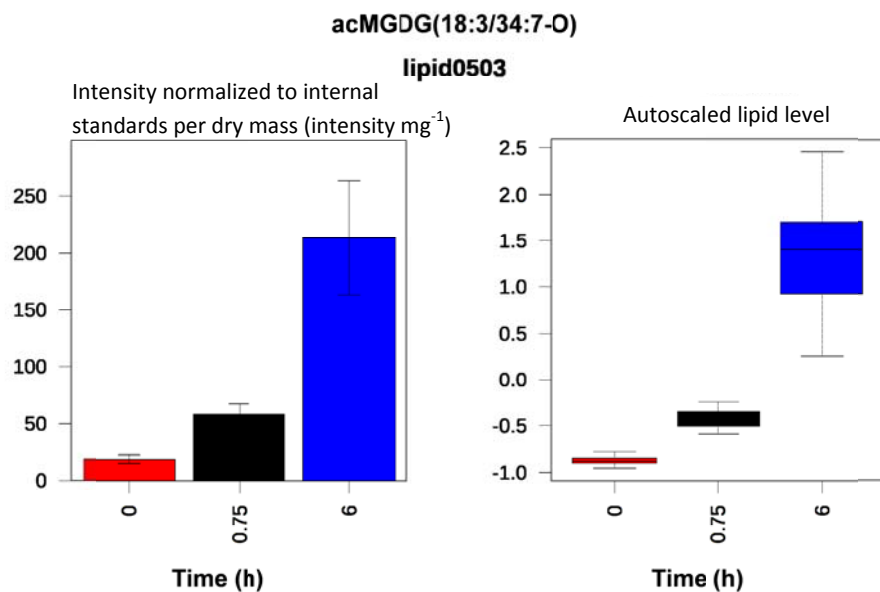
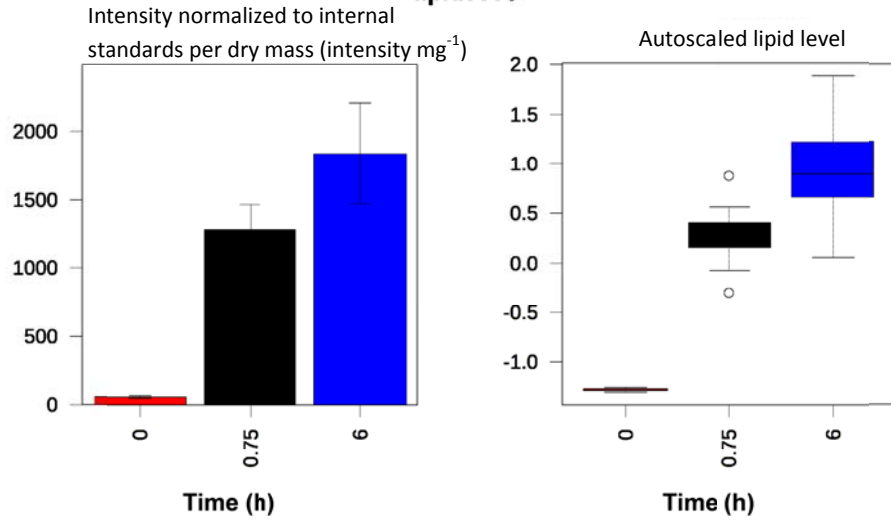


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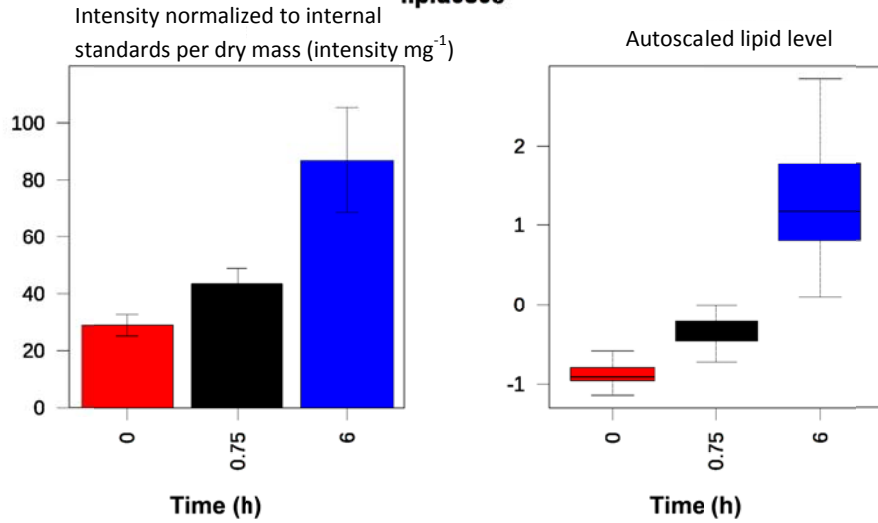
acMGDG(18:3/34:8-2O) or acMGDG(18:3/36:6)

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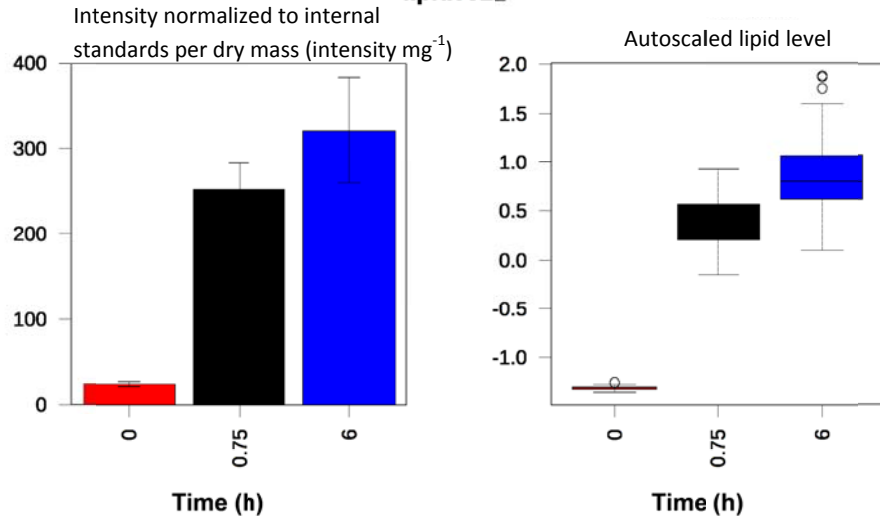
acMGDG(18:3/36:7-O)

lipid0508



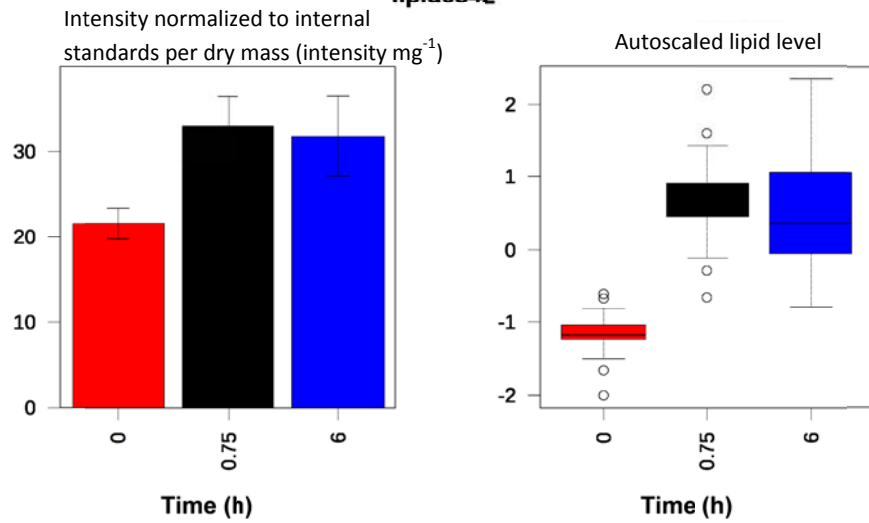
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lipid0512



acMGDG(18:3-O/34:6)

lipid0542



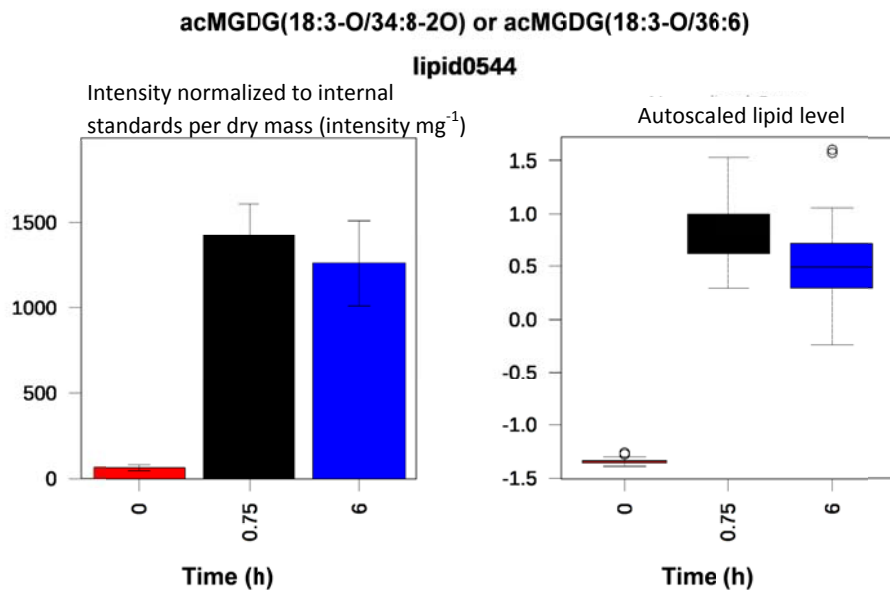
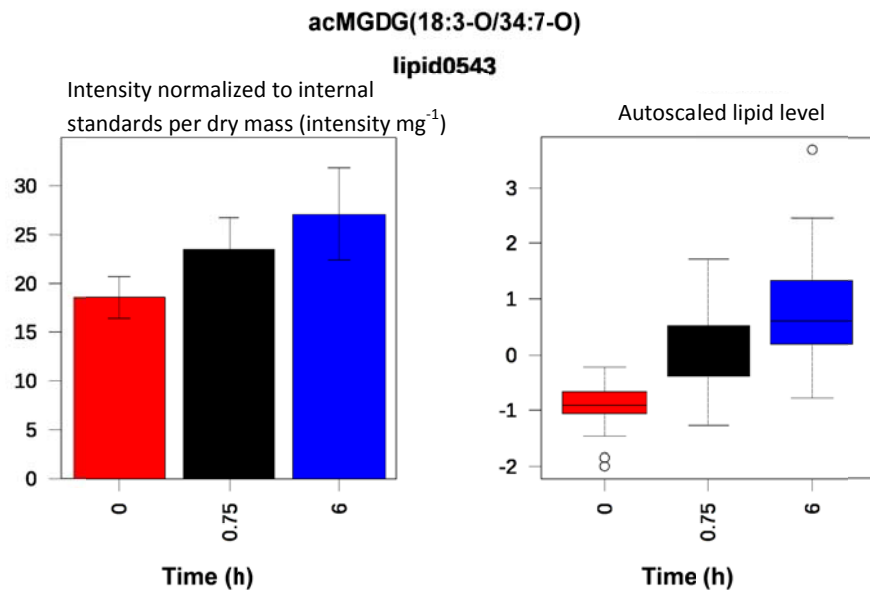


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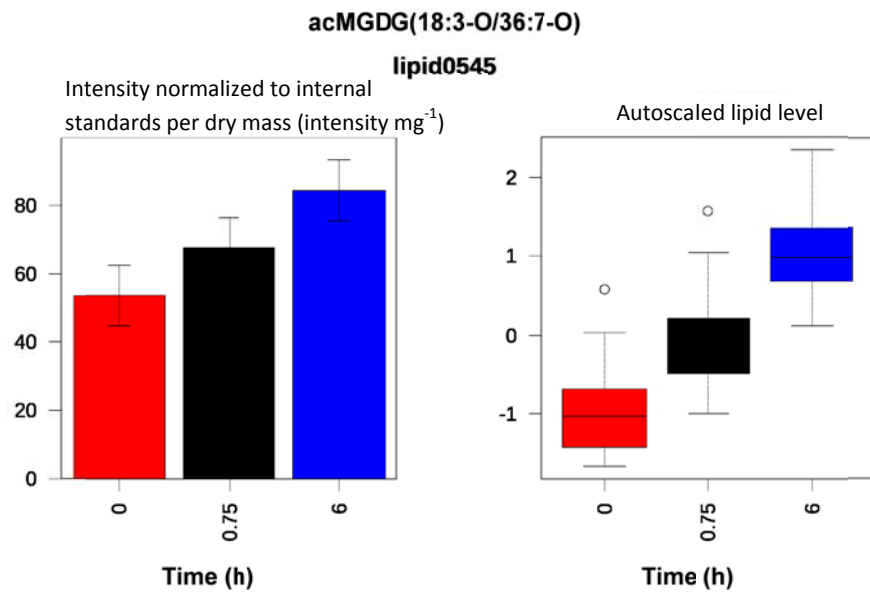
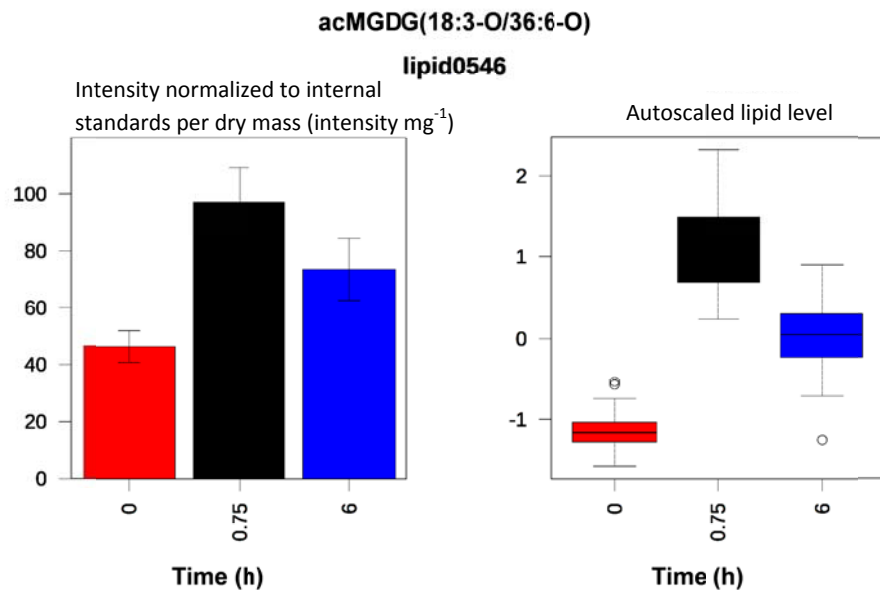
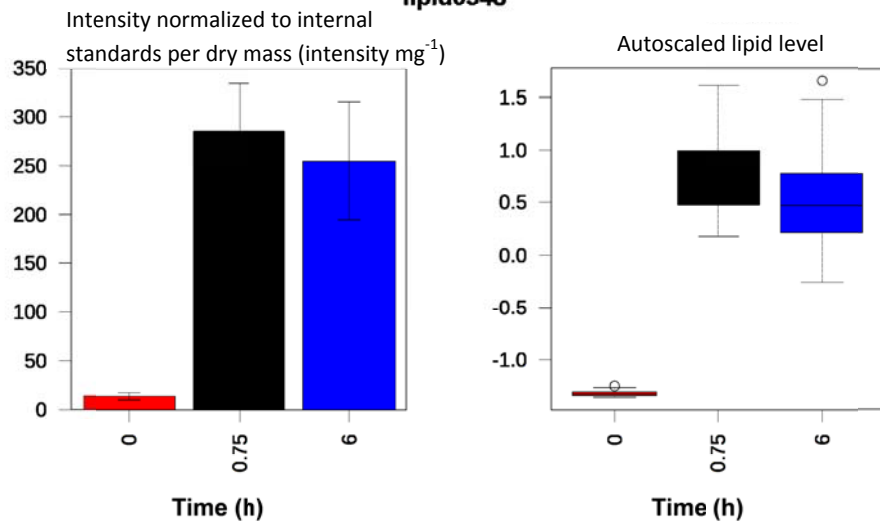


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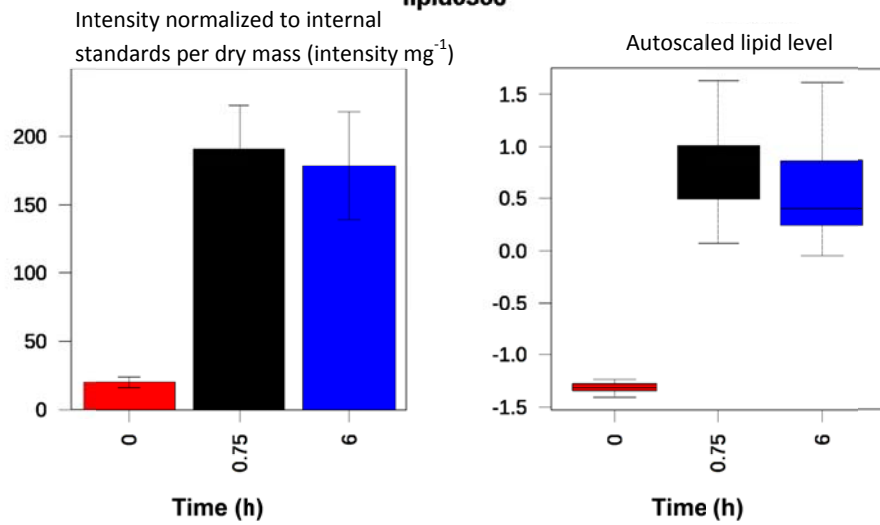
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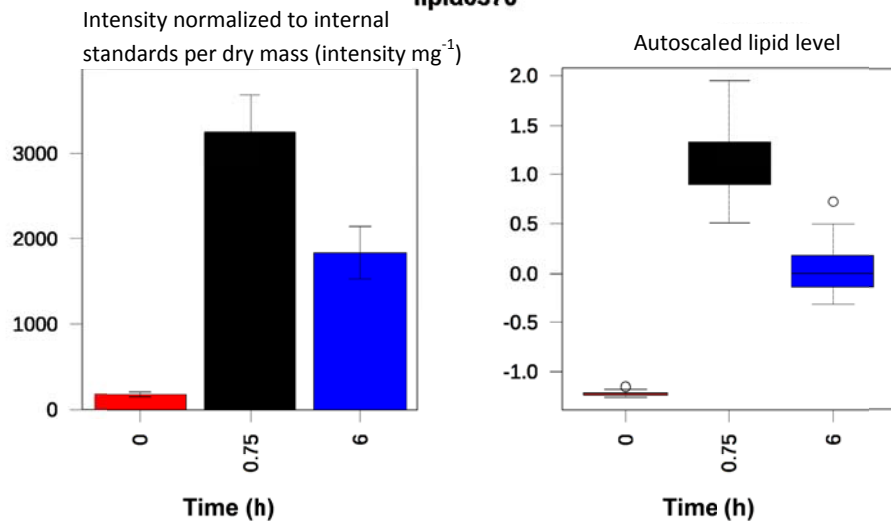
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lipid0566



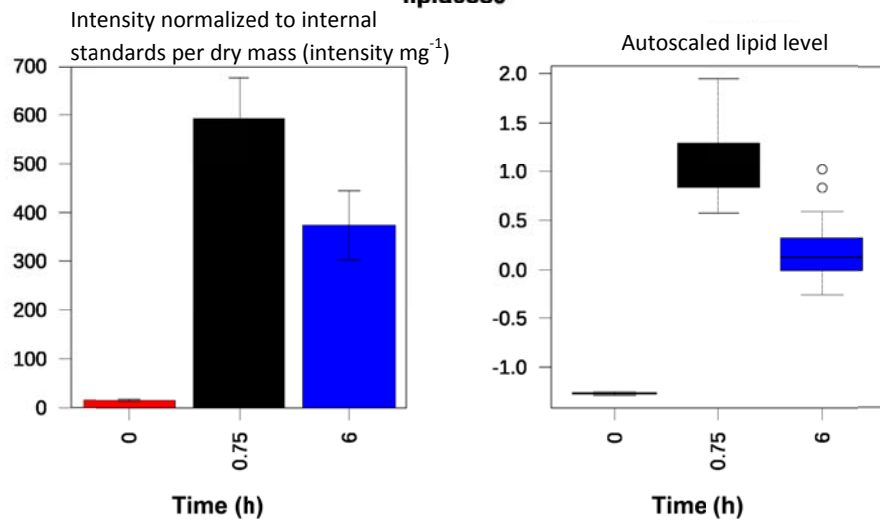
acMGDG(18:3-2O/34:8-2O) or acMGDG(18:3-2O/36:6)

lipid0570



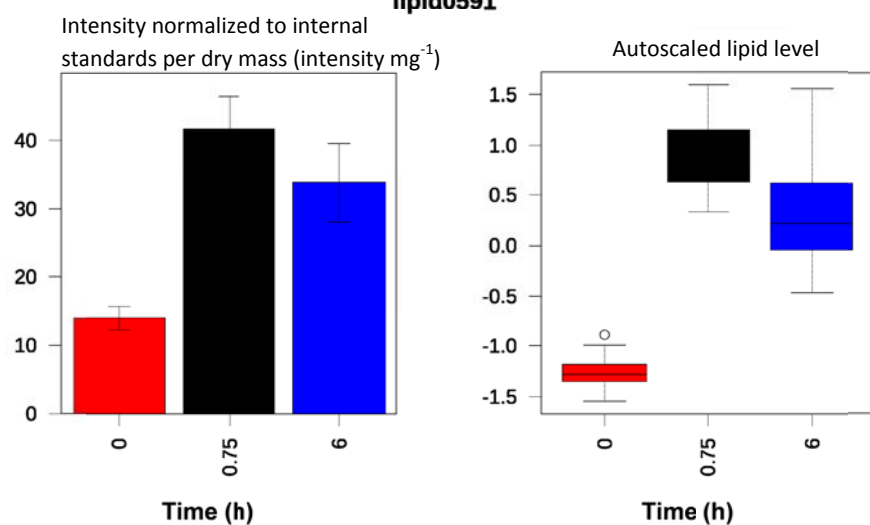
acMGDG(18:3-2O/36:8-2O)

lipid0580



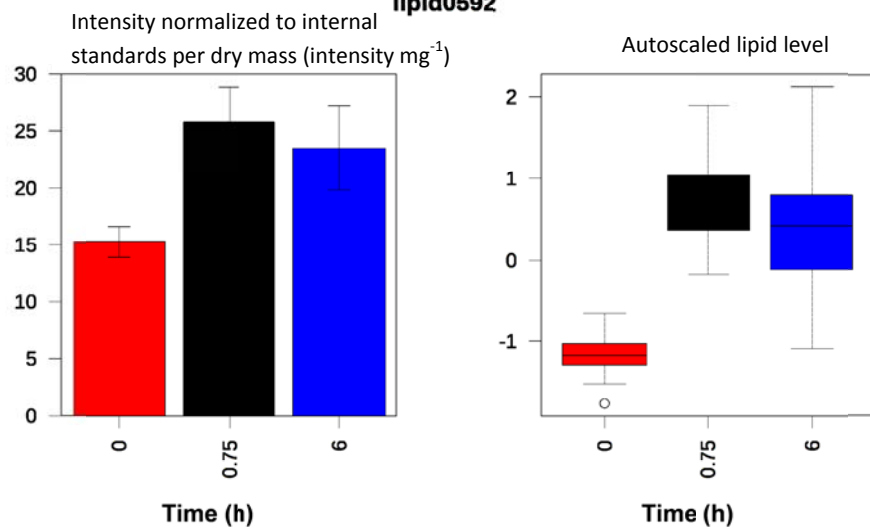
acMGDG(18:3-3O/34:6)

lipid0591



acMGDG(18:3-3O/34:7-O)

lipid0592



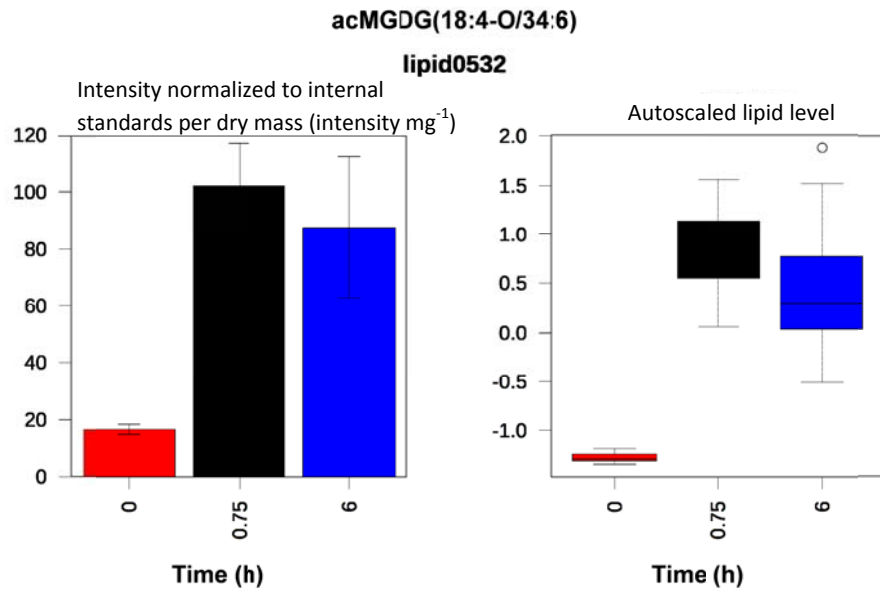
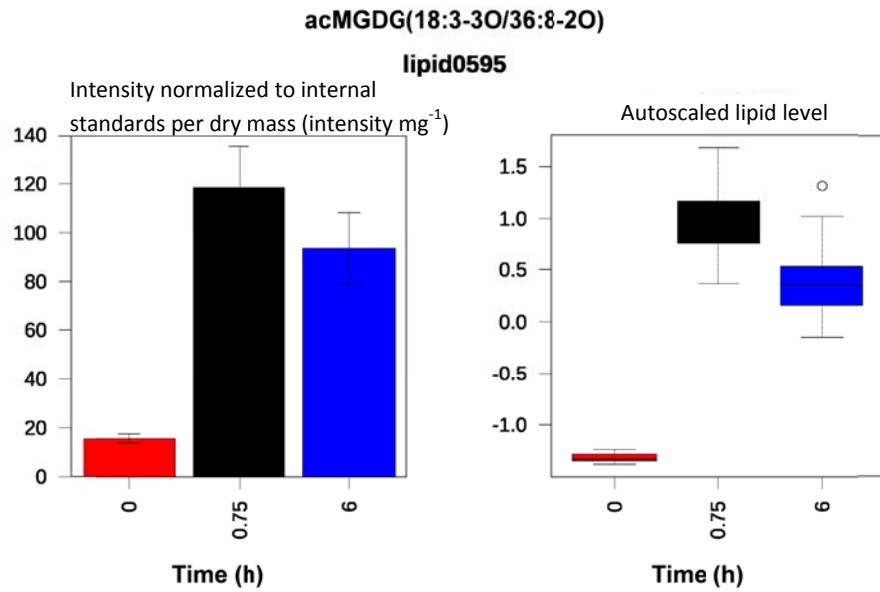


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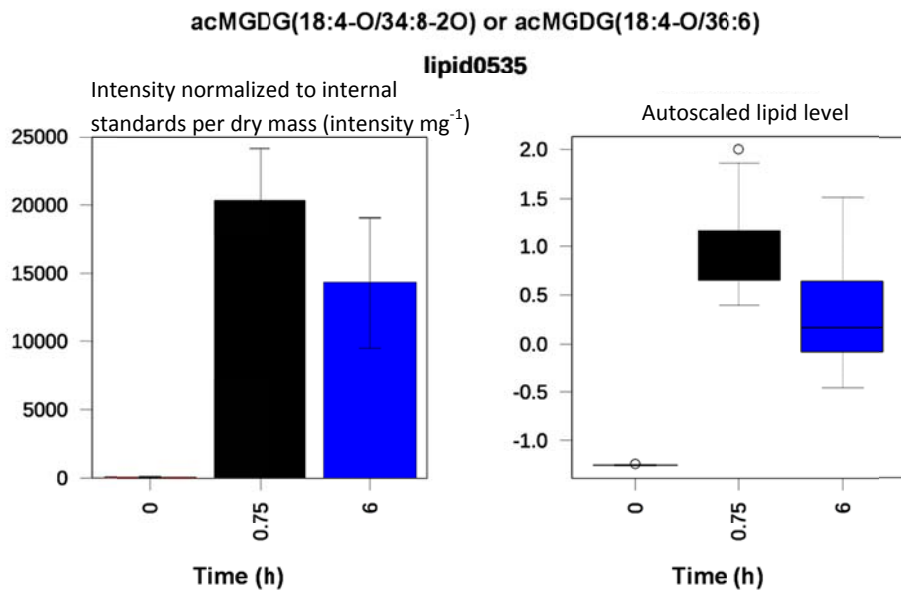
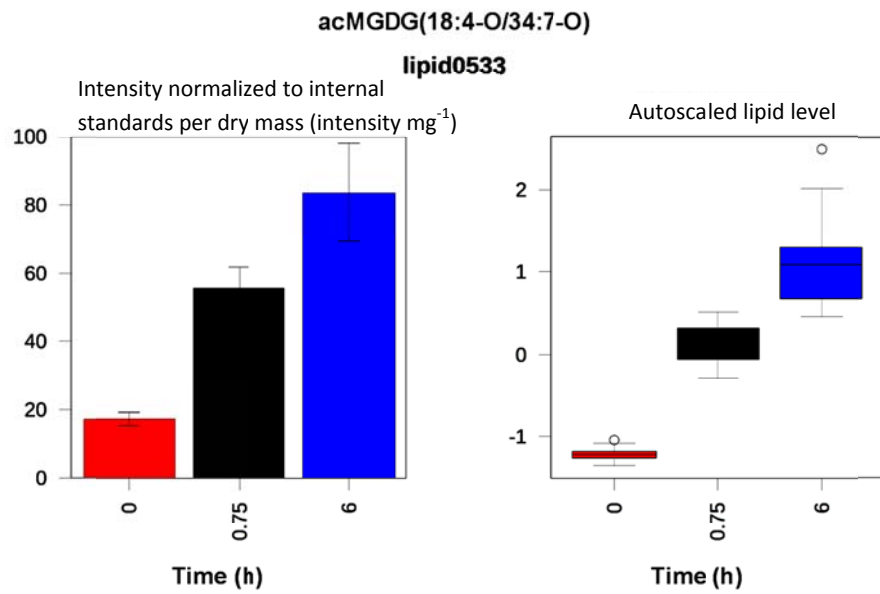


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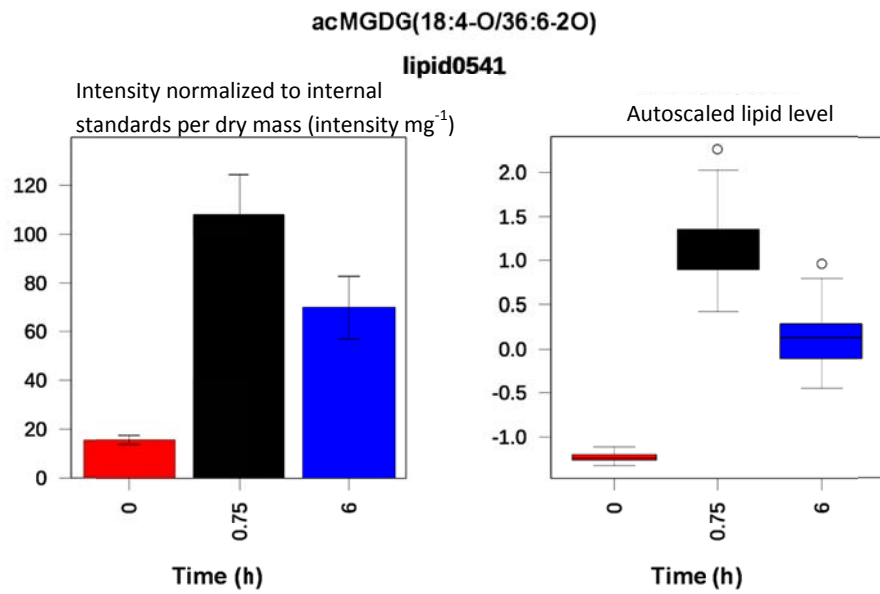
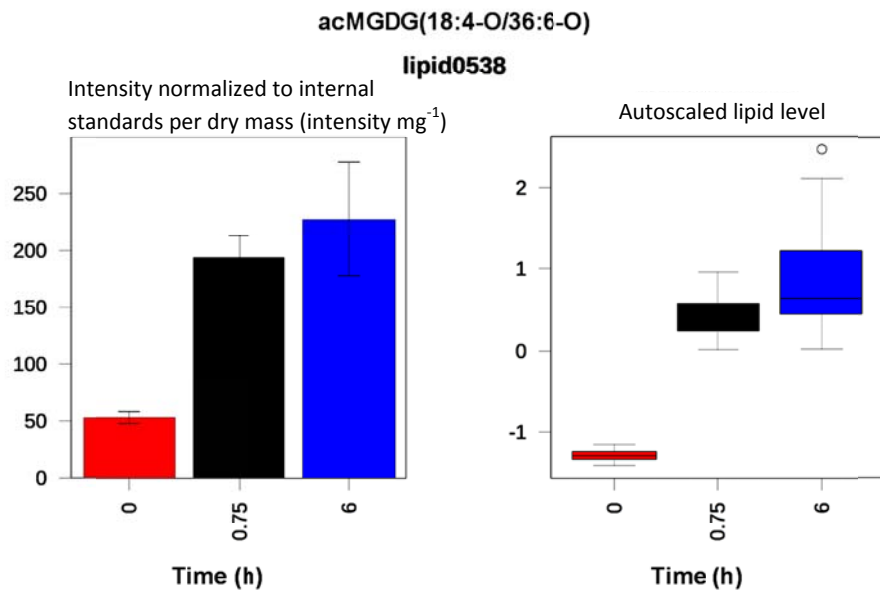
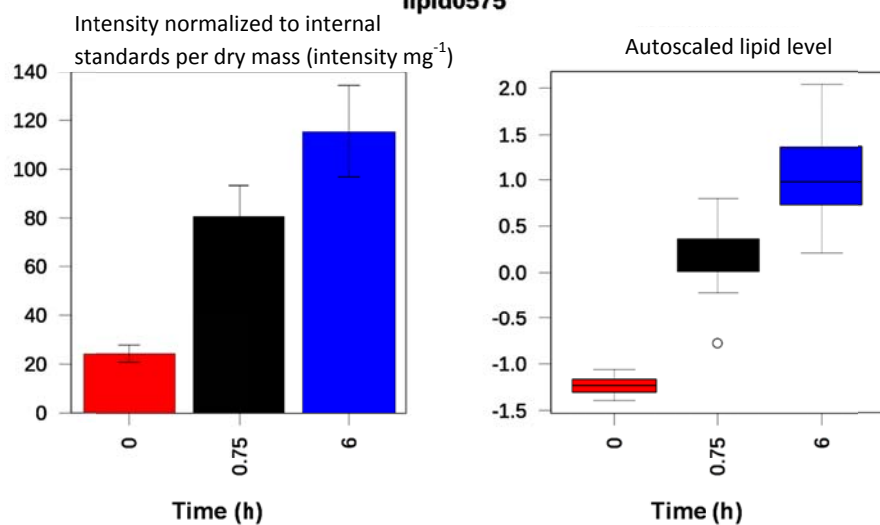


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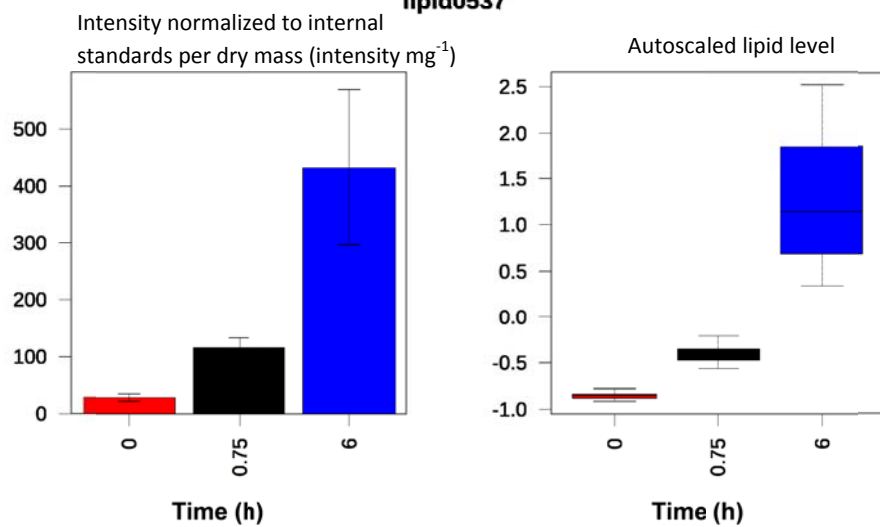
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lipid0575



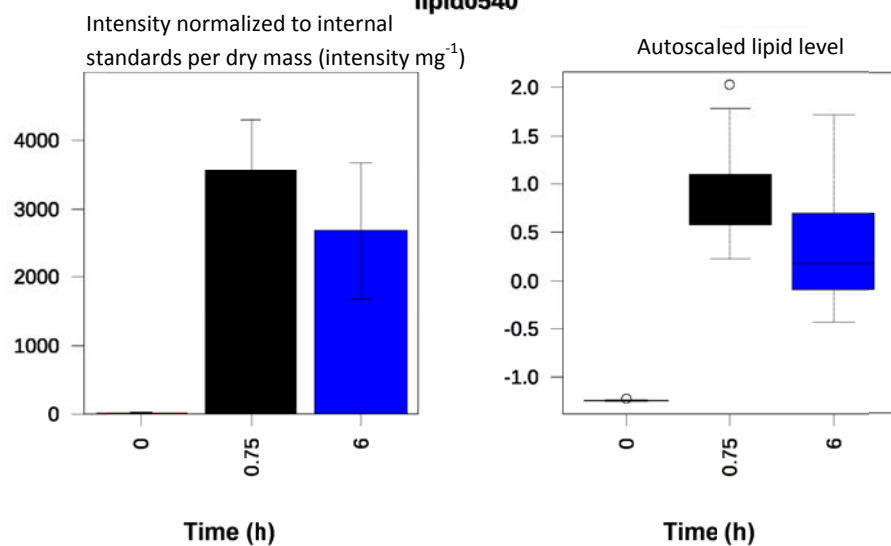
acMGDG(18:4-O/36:7-O)

lipid0537



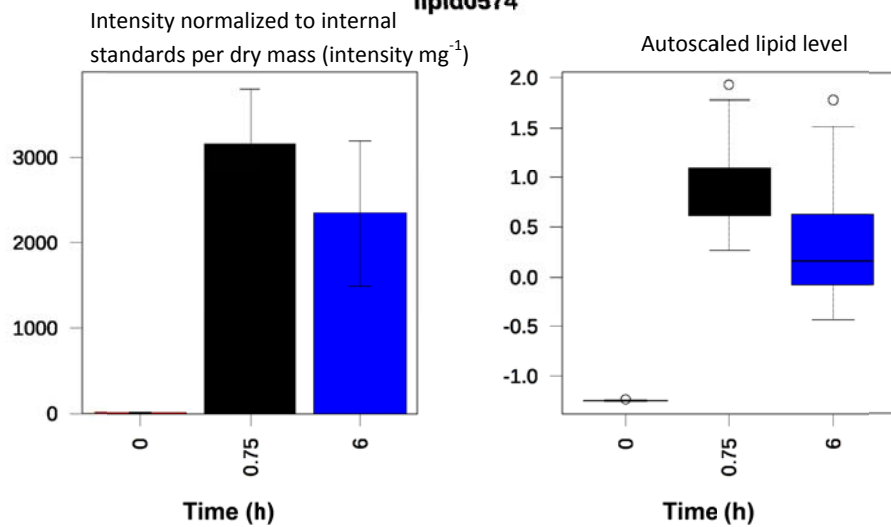
acMGDG(18:4-O/36:8-2O)

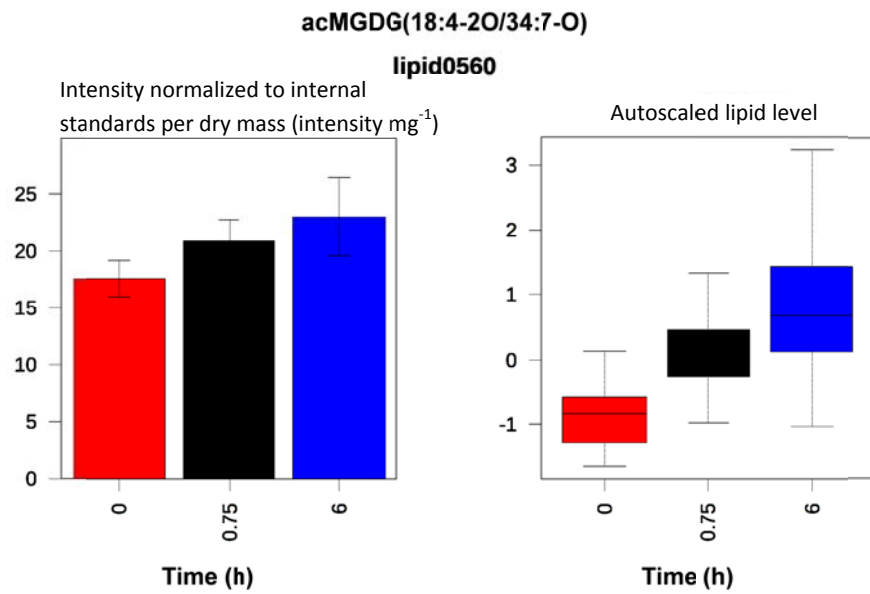
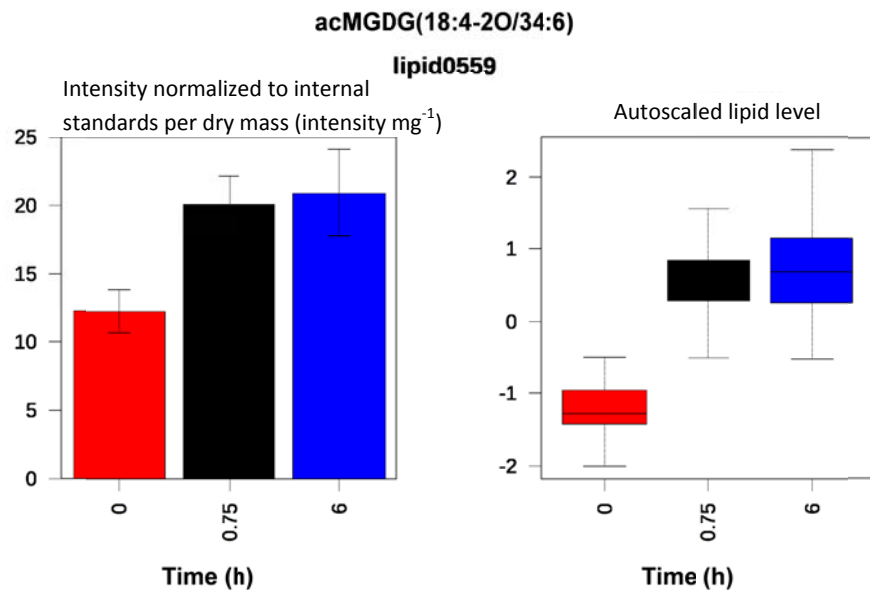
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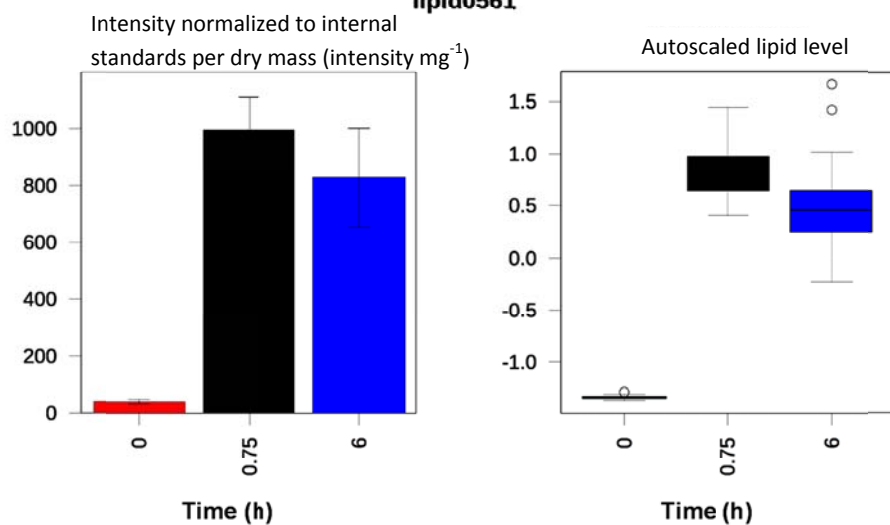
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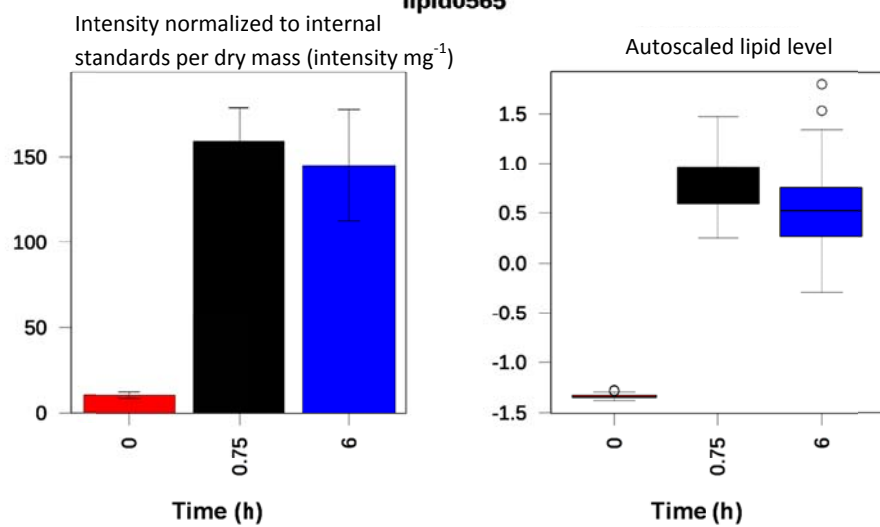
acMGDG(18:4-2O/34:8-2O) or acMGDG(18:4-2O/36:6)

lipid0561



acMGDG(18:4-2O/36:8-2O)

lipid0565



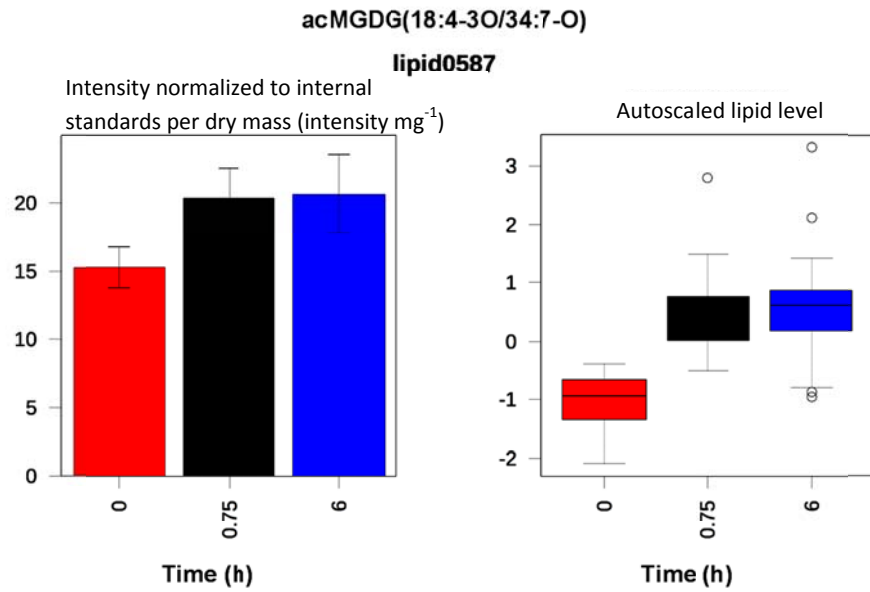
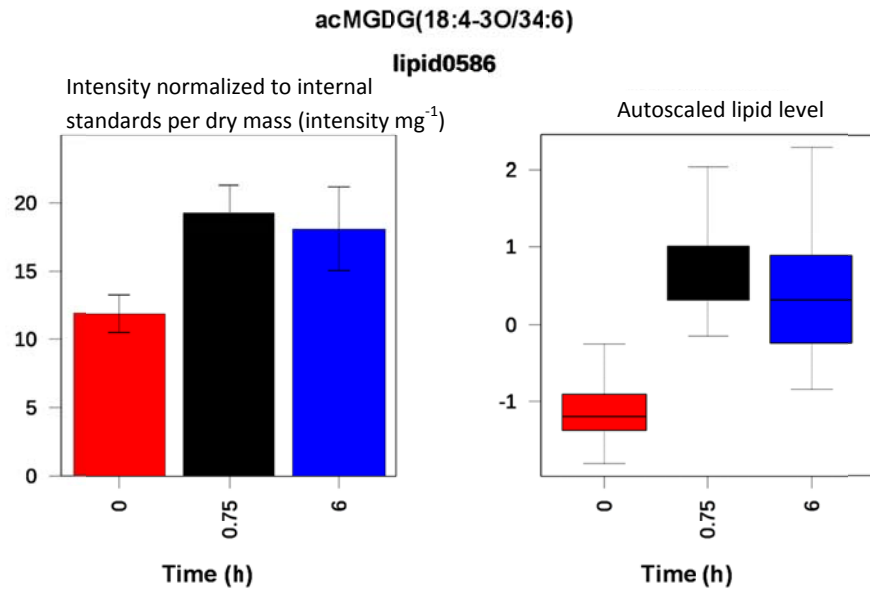
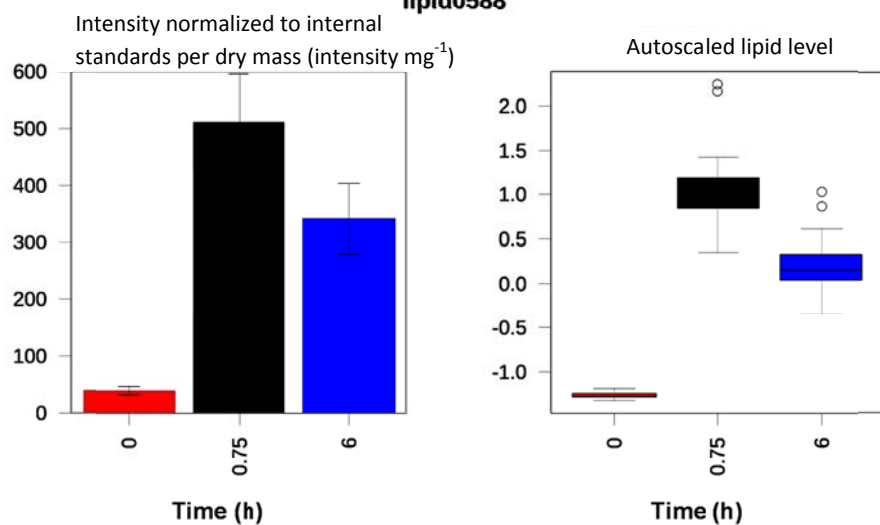


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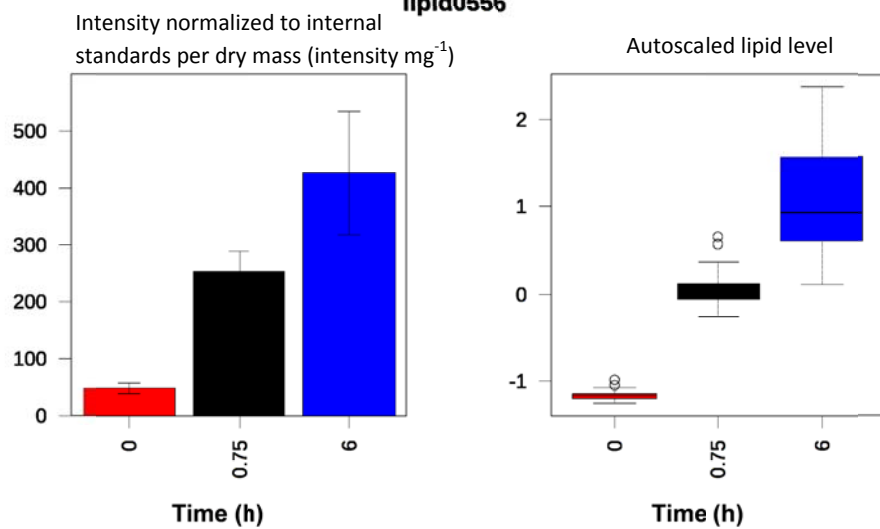
acMGDG(18:4-3O/34:8-2O) or acMGDG(18:4-3O/36:6)

lipid0588



acMGDG(18:5-2O/34:8-2O) or acMGDG(18:5-2O/36:6)

lipid0556



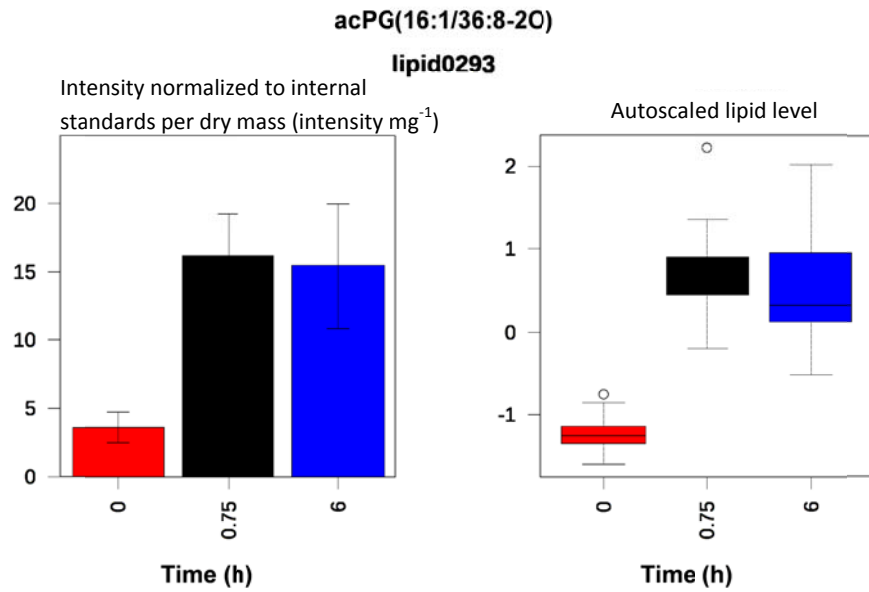
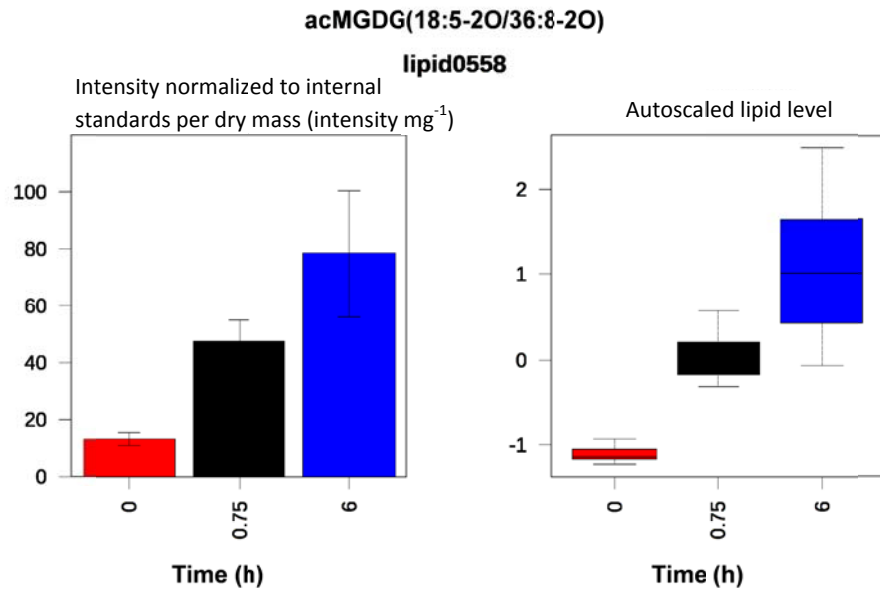


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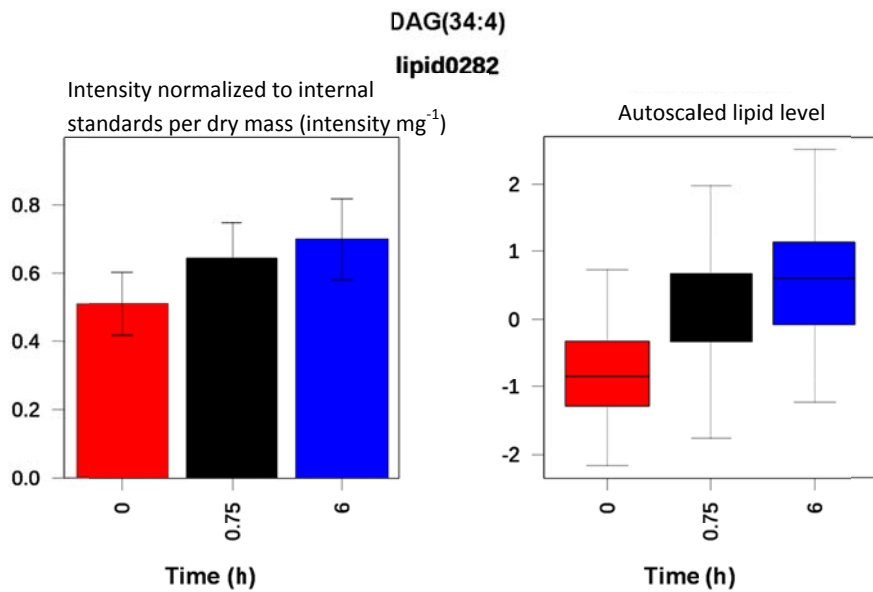
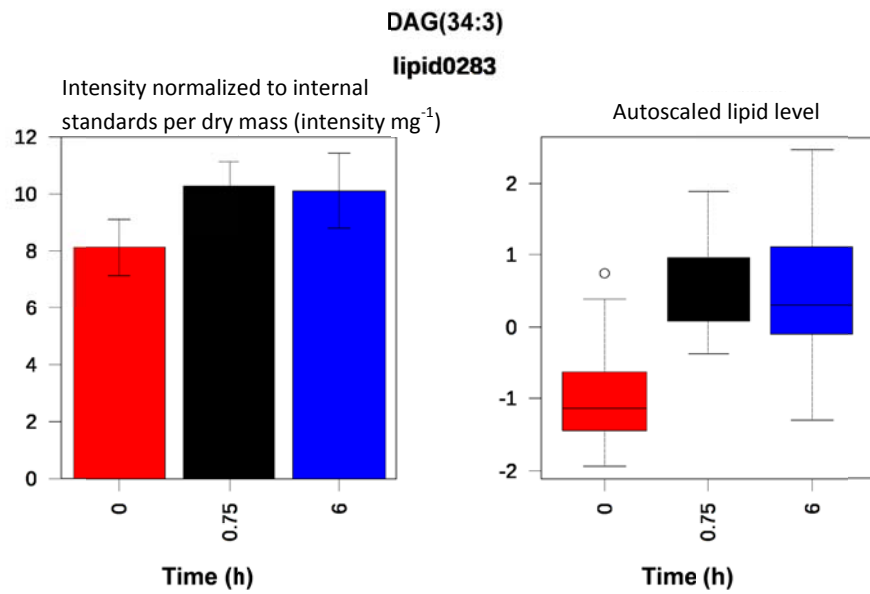
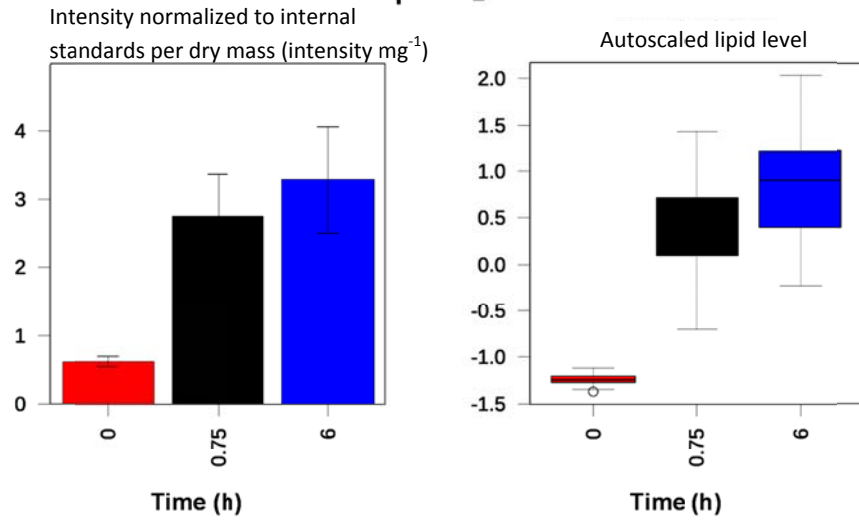


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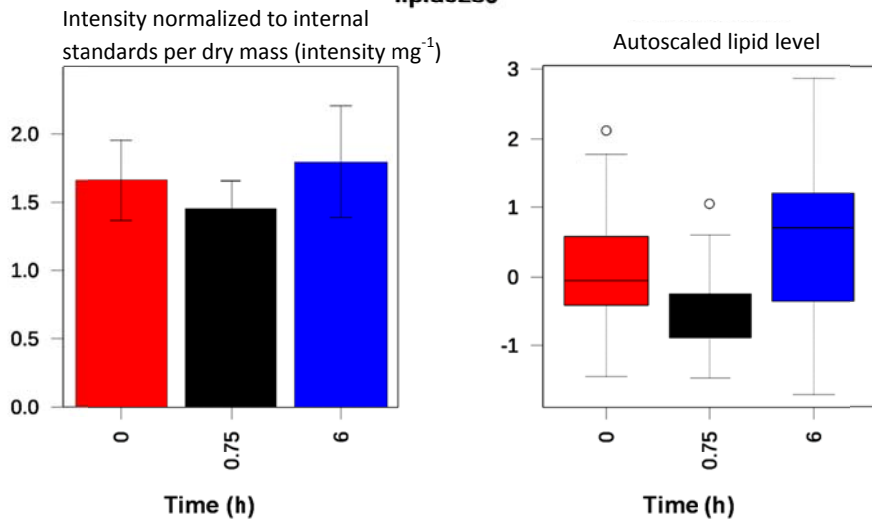
DAG(34:6)

lipid0281



DAG(36:4)

lipid0286



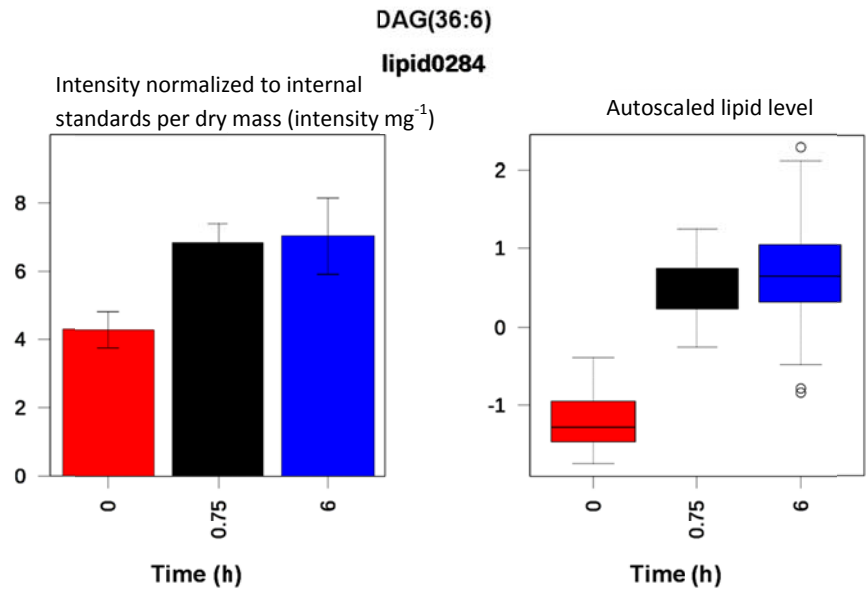
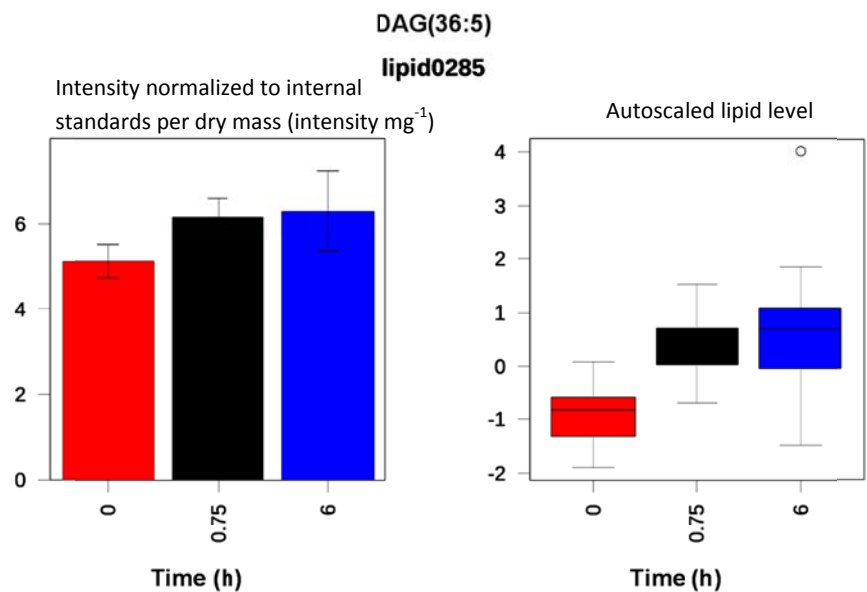
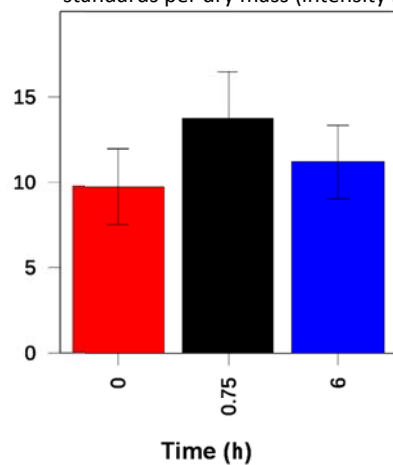


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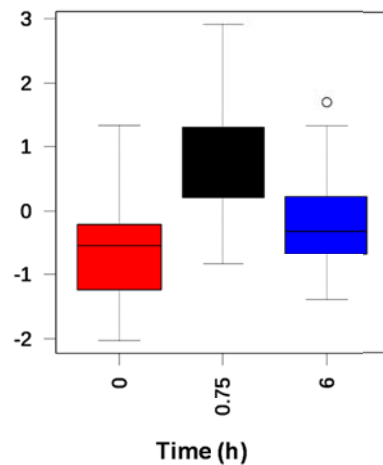
DGDG(16:0/18:3-2O)

lipid0395

Intensity normalized to internal standards per dry mass (intensity mg^{-1})



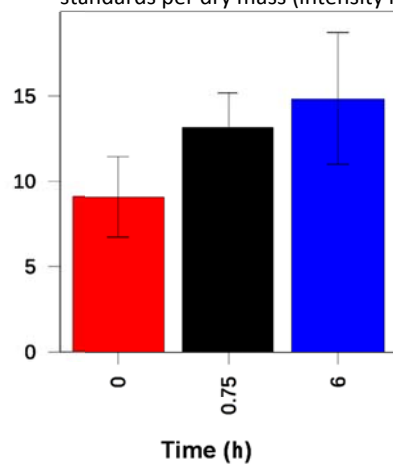
Autoscaled lipid level



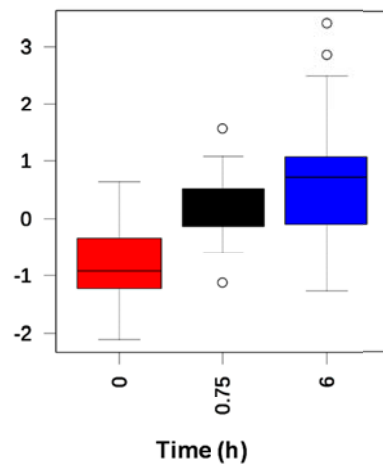
DGDG(16:0/18:3-O)

lipid0632

Intensity normalized to internal standards per dry mass (intensity mg^{-1})

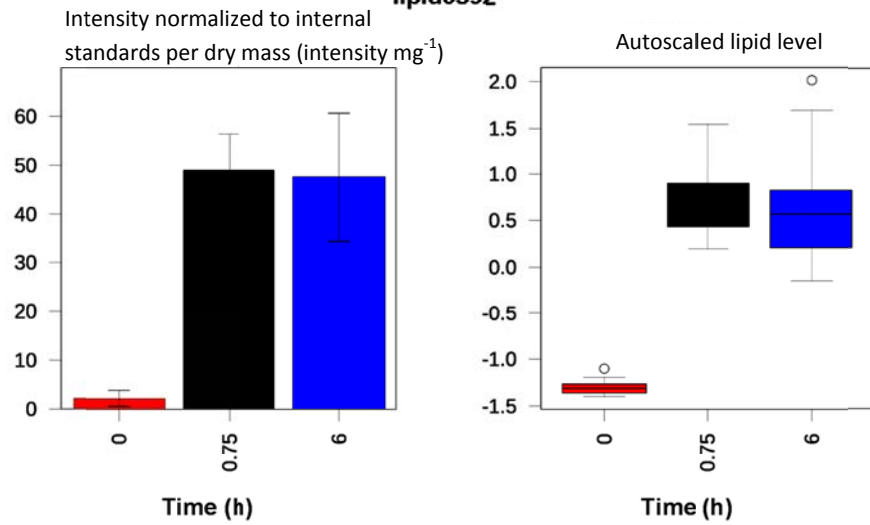


Autoscaled lipid level



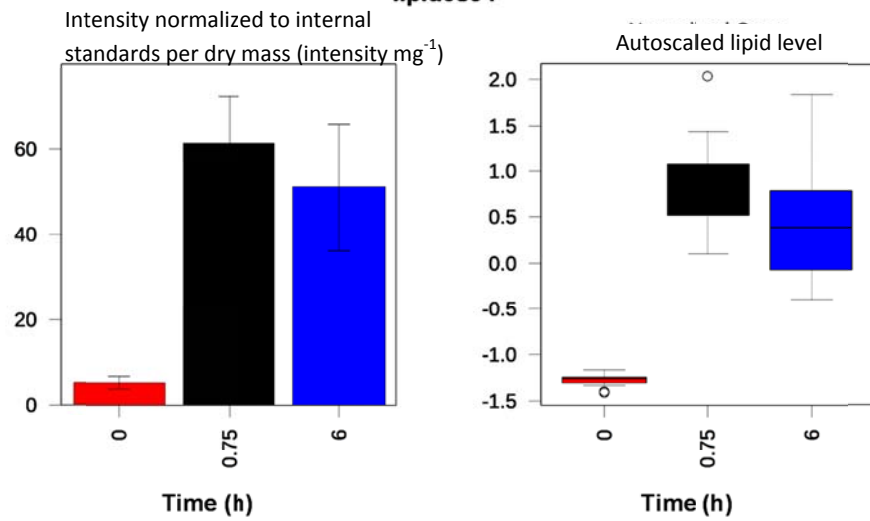
DGDG(16:0/18:4-0)

lipid0392



DGDG(18:3-20/16:3)

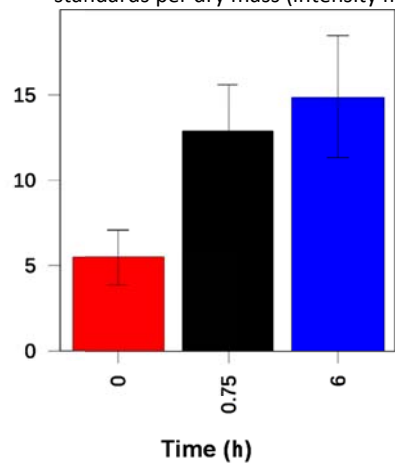
lipid0394



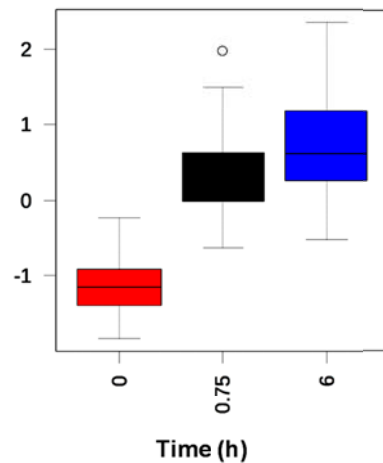
DGDG(18:4-O/16:3)

lipid0387

Intensity normalized to internal standards per dry mass (intensity mg^{-1})



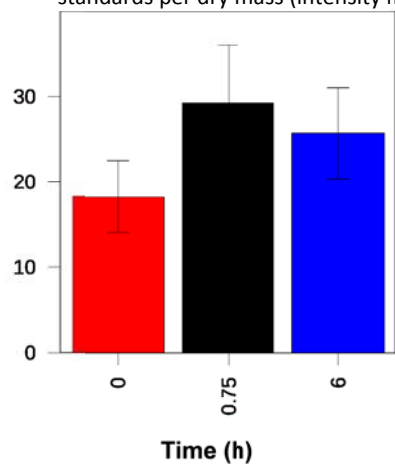
Autoscaled lipid level



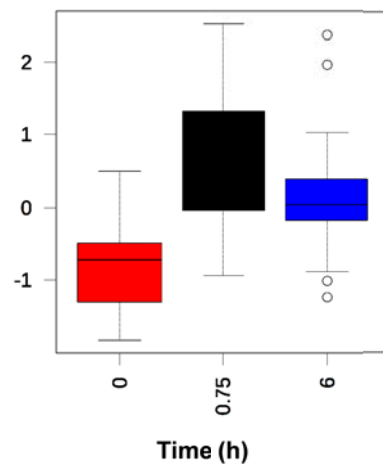
Arabidopsis C: DGDG(18:4-O/16:4-O)

lipid0338

Intensity normalized to internal standards per dry mass (intensity mg^{-1})



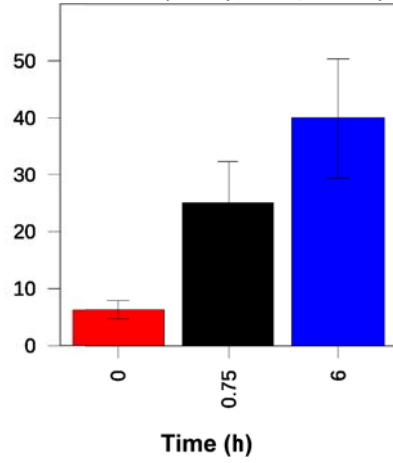
Autoscaled lipid level



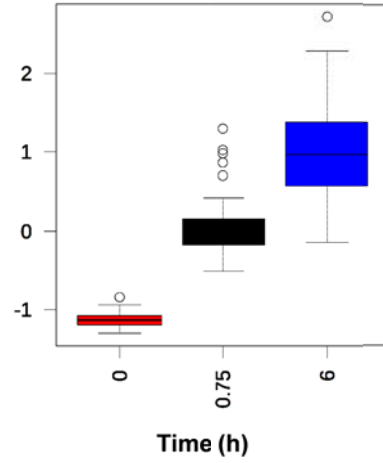
DGDG(18:4-O/18:3)

lipid0396

Intensity normalized to internal standards per dry mass (intensity mg^{-1})



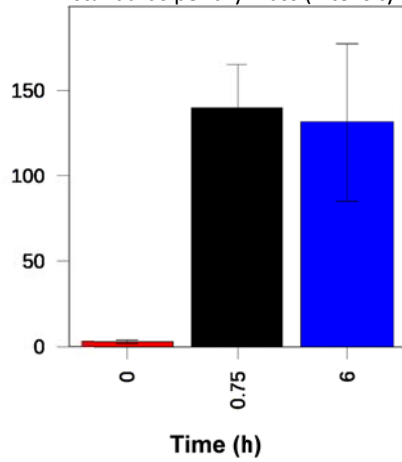
Autoscaled lipid level



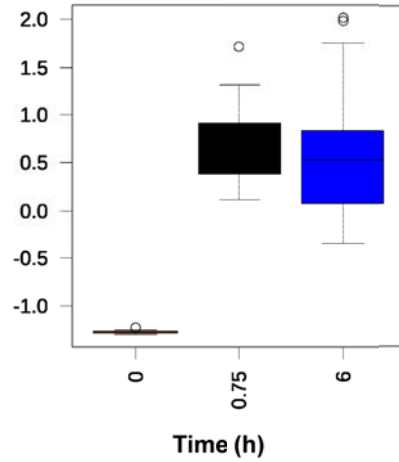
Arabidopside D: DGDG(18:4-O/18:4-O)

lipid0398

Intensity normalized to internal standards per dry mass (intensity mg^{-1})

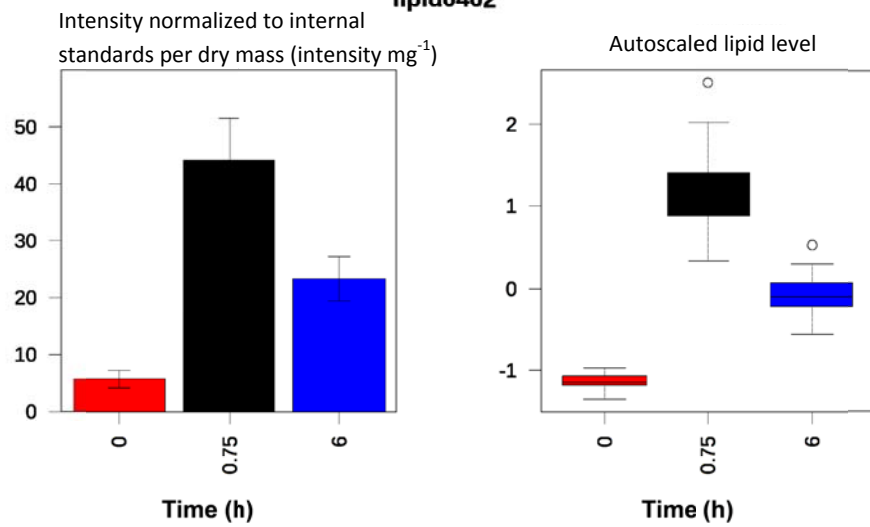


Autoscaled lipid level



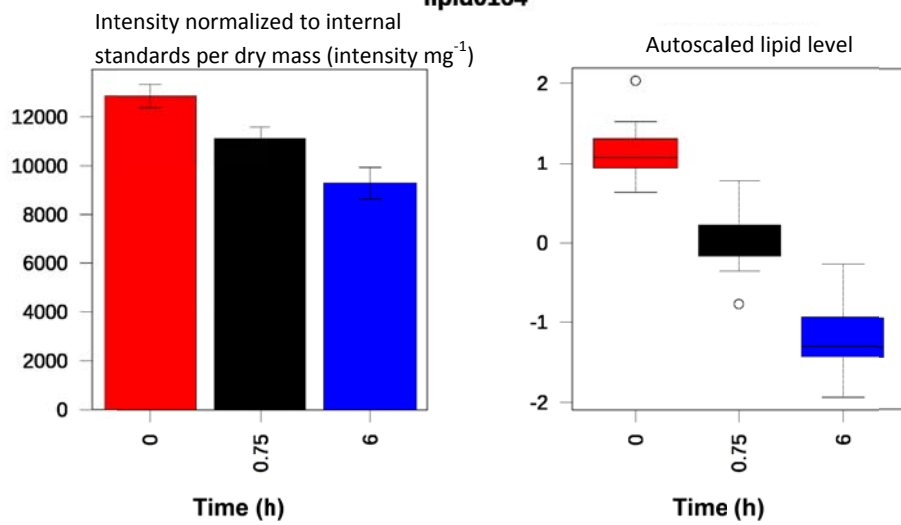
DGDG(18:4-O/18:4-2O) or DGDG(18:4-O/20:2)

lipid0402



DGDG(34:3)

lipid0164



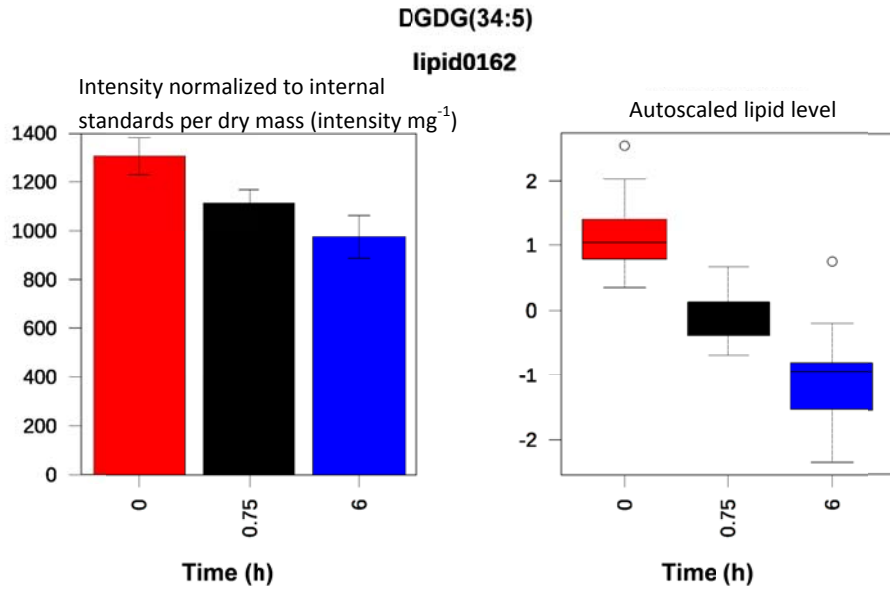
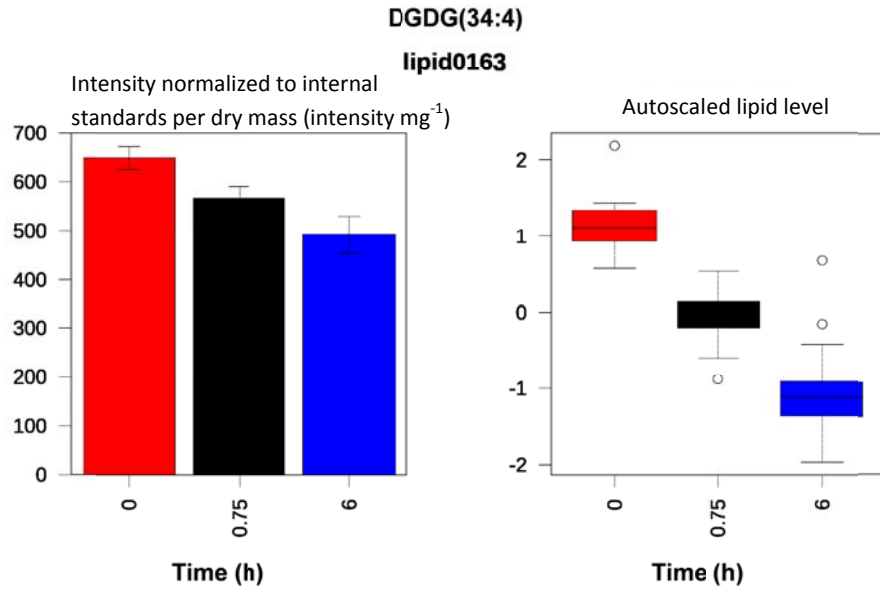
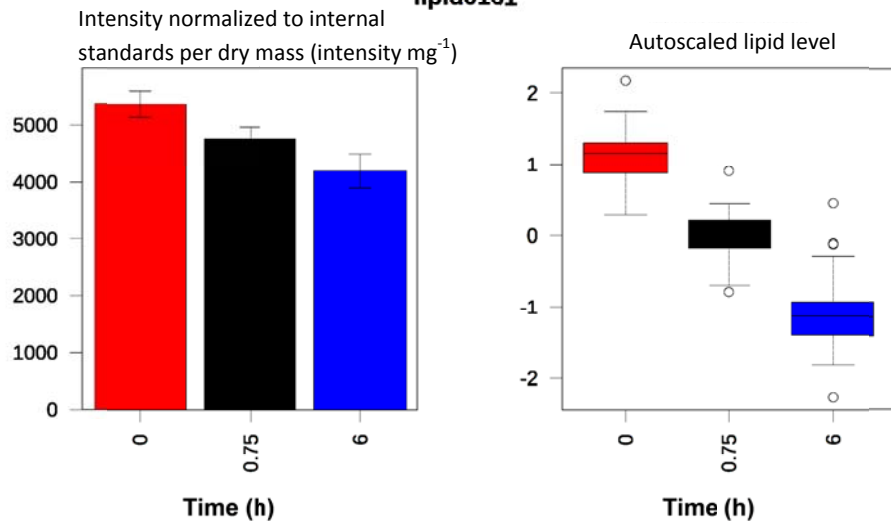


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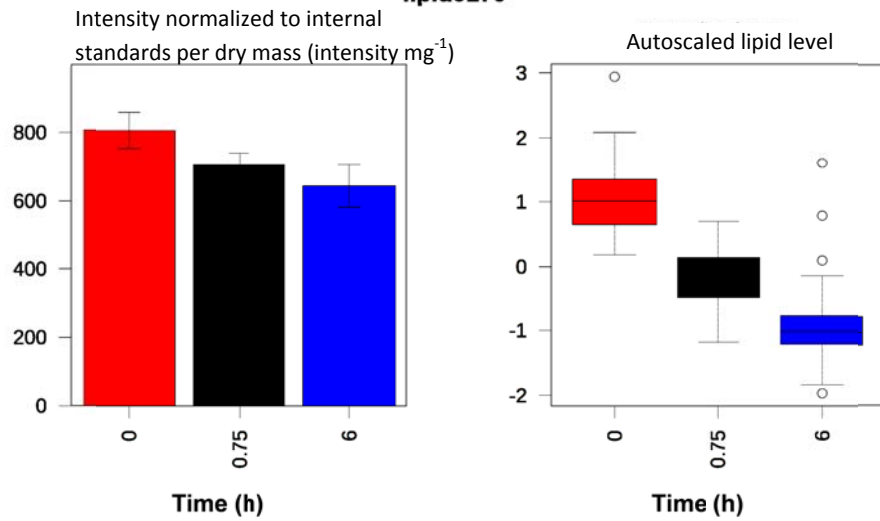
DGDG(34:6)

lipid0161



DGDG(36:3)

lipid0170



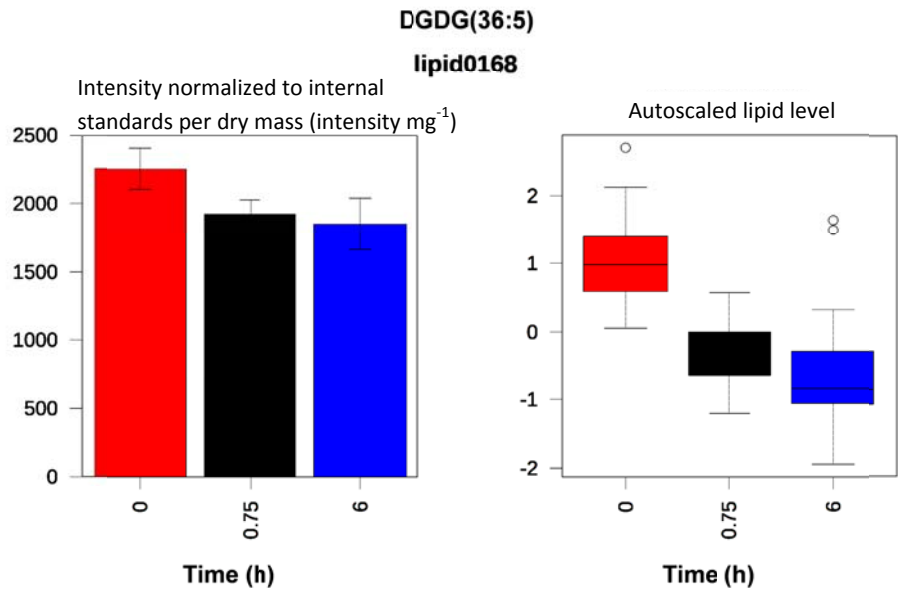
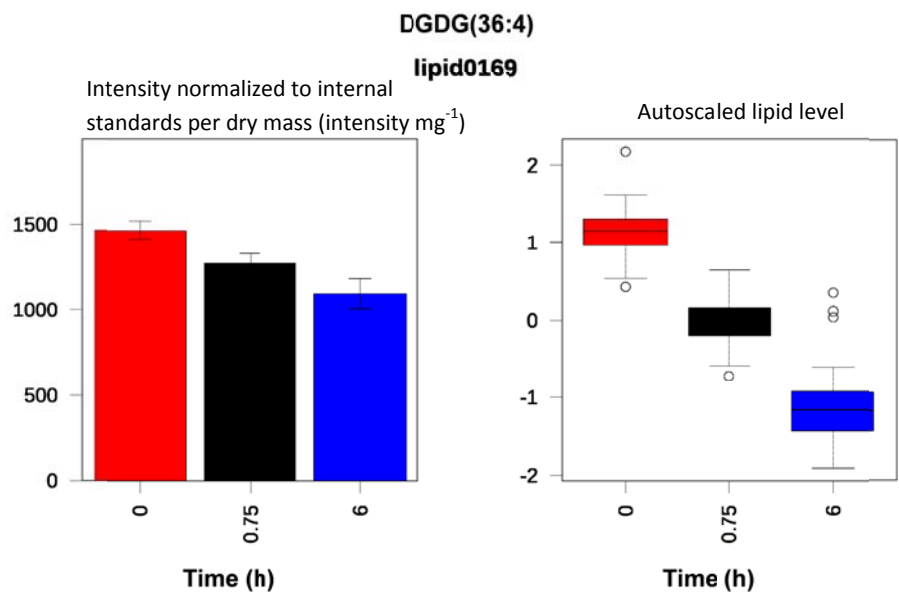


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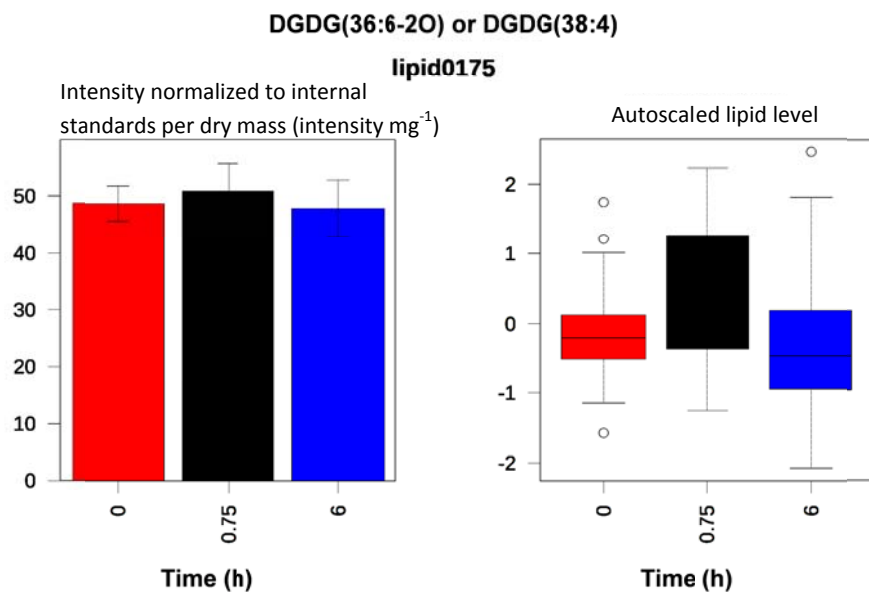
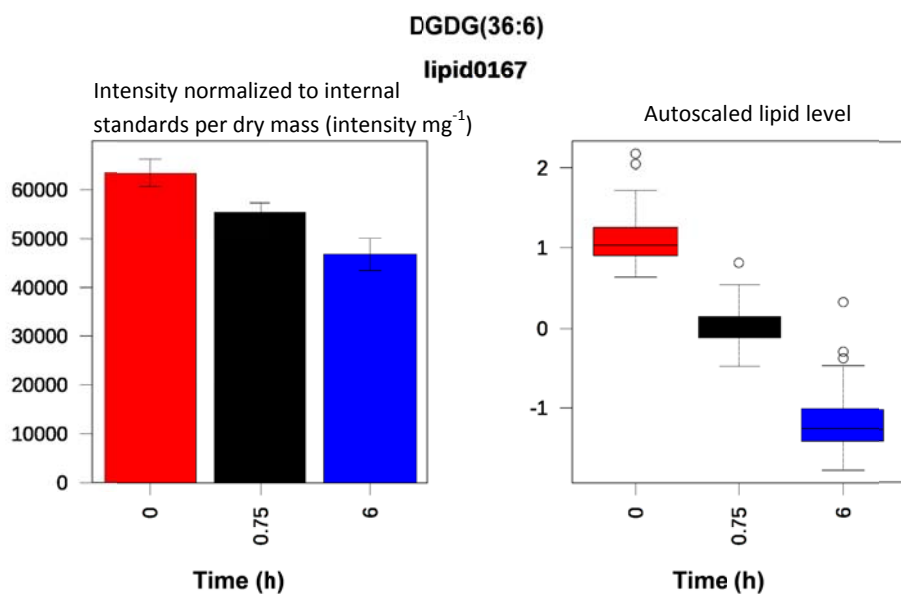
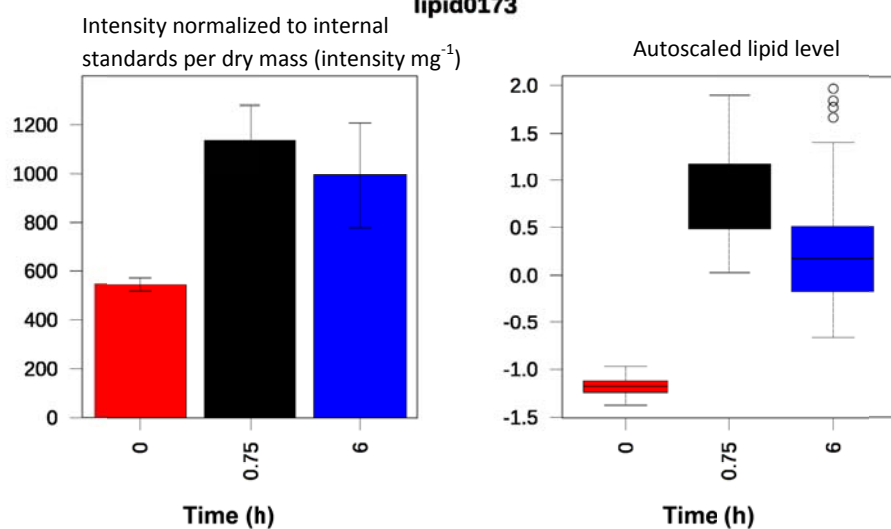


Figure S4.5 -page 46

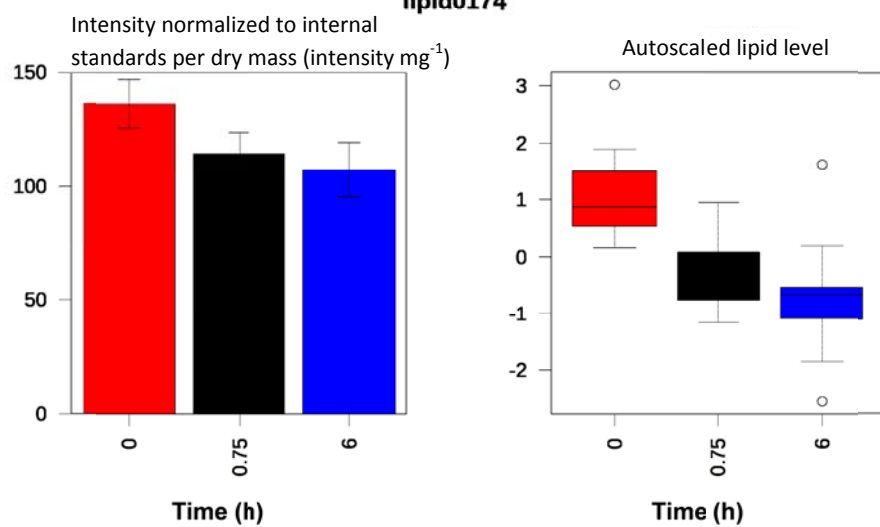
DGDG(36:8-20) or DGDG(38:6)

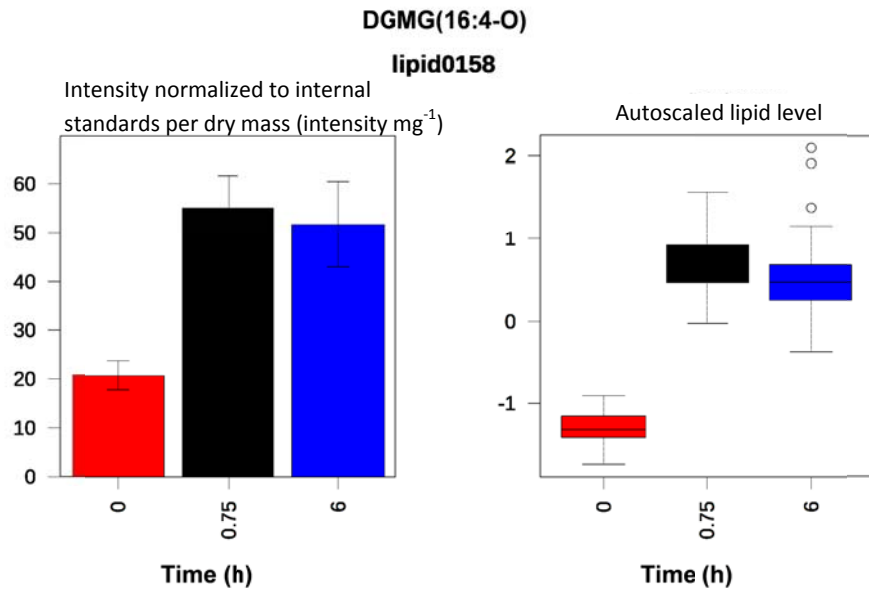
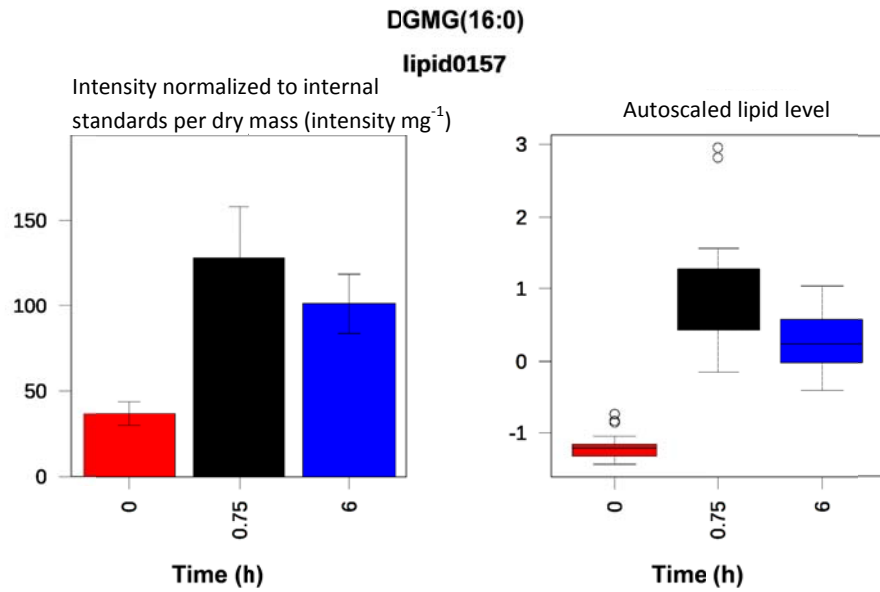
lipid0173

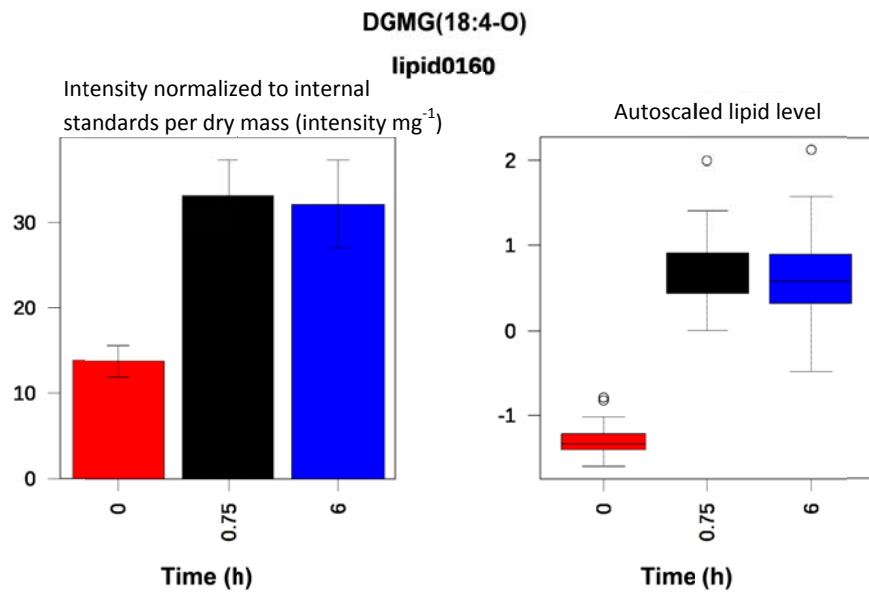
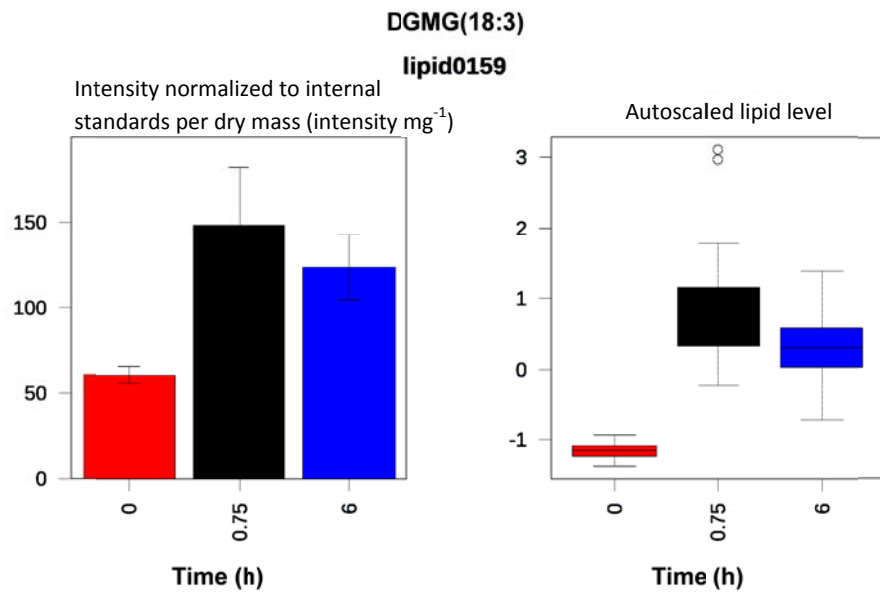


DGDG(38:5) or DGDG(36:7-20)

lipid0174

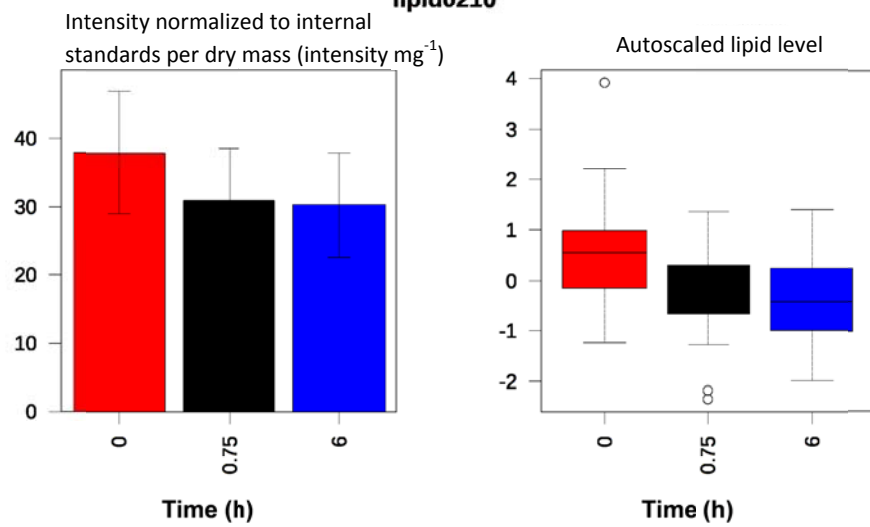






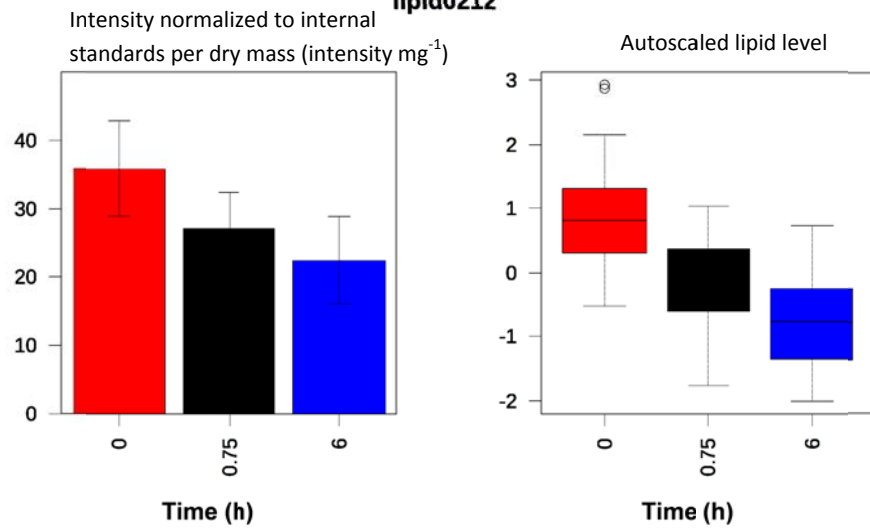
GIPC(42:1)-3

lipid0210



GIPC(42:2)-3

lipid0212



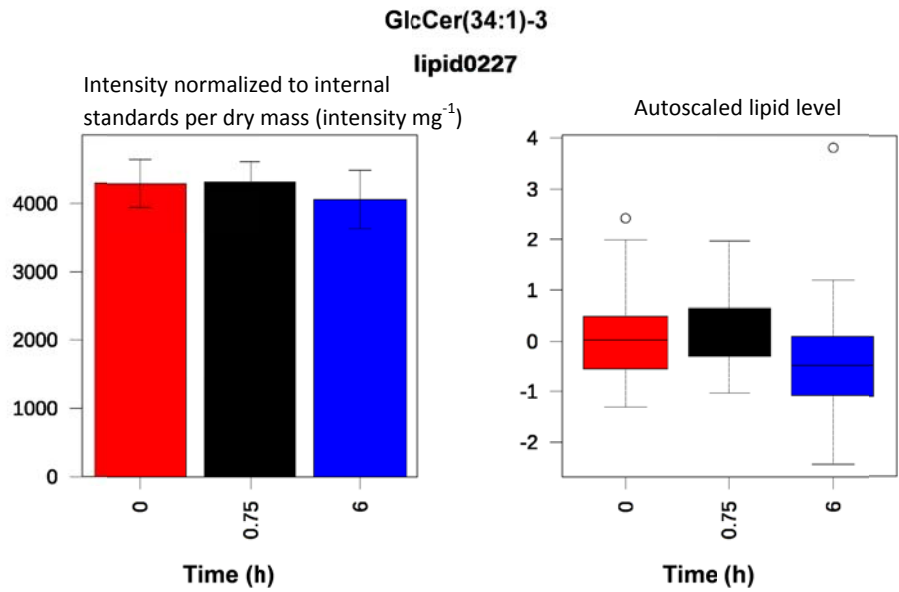
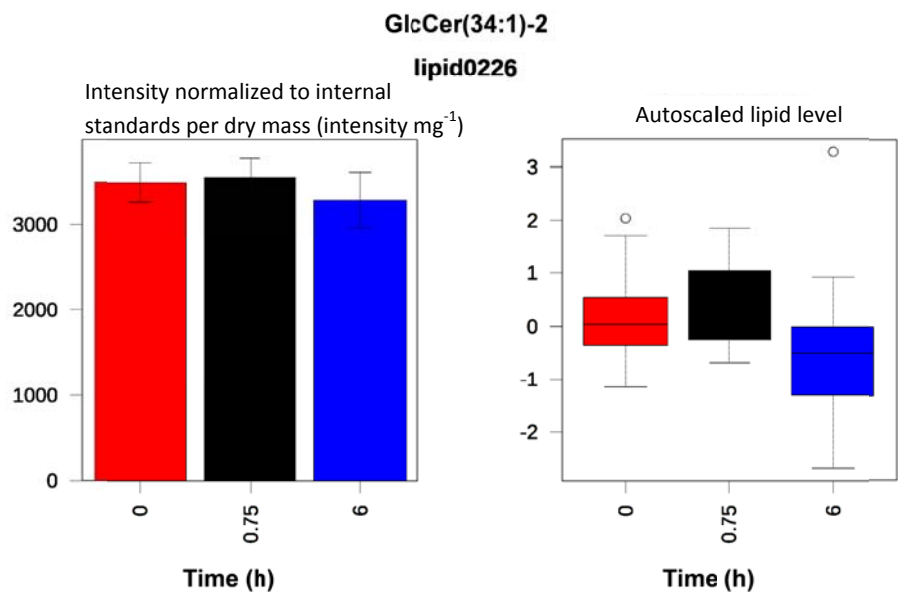


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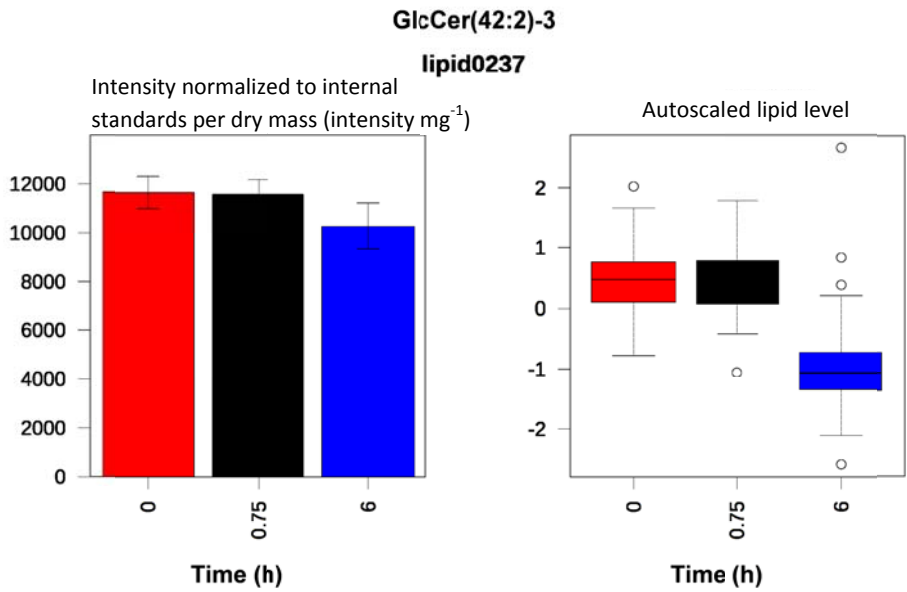
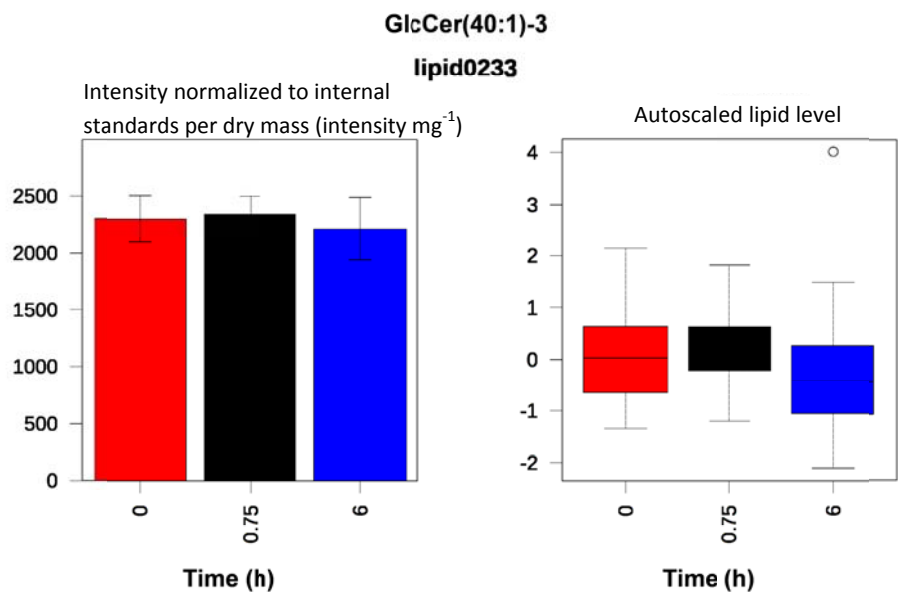
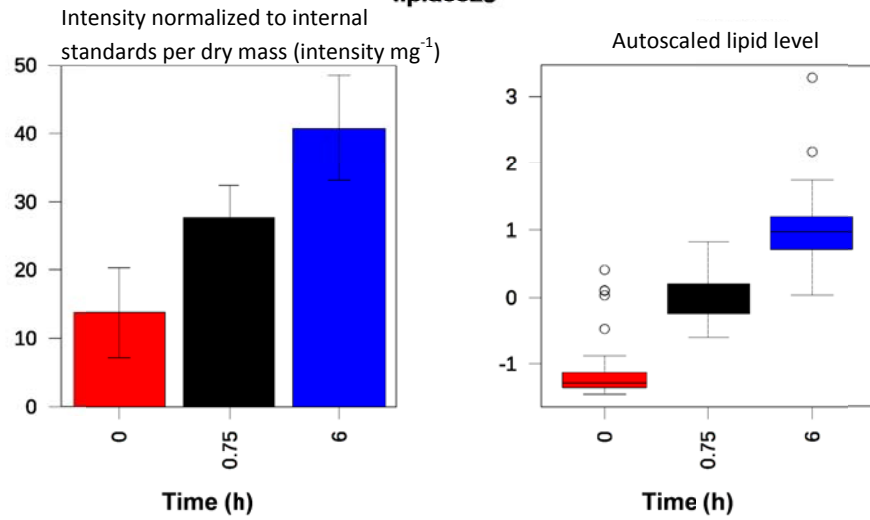
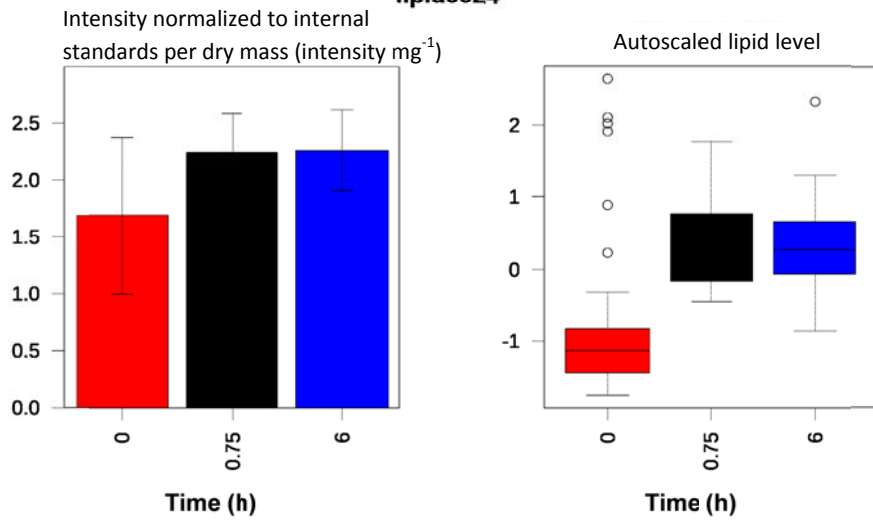


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LPC(16:0)
lipid0025



LPC(16:1)
lipid0024



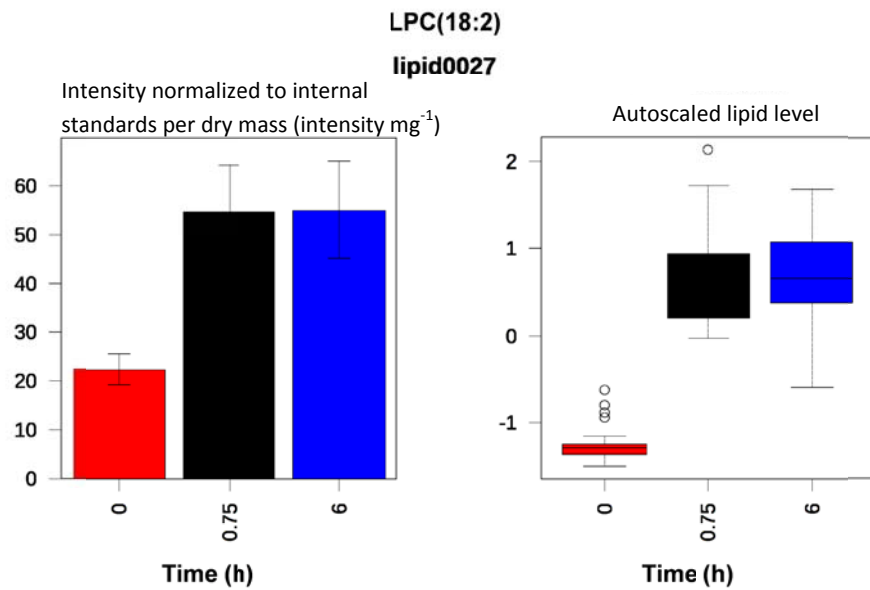
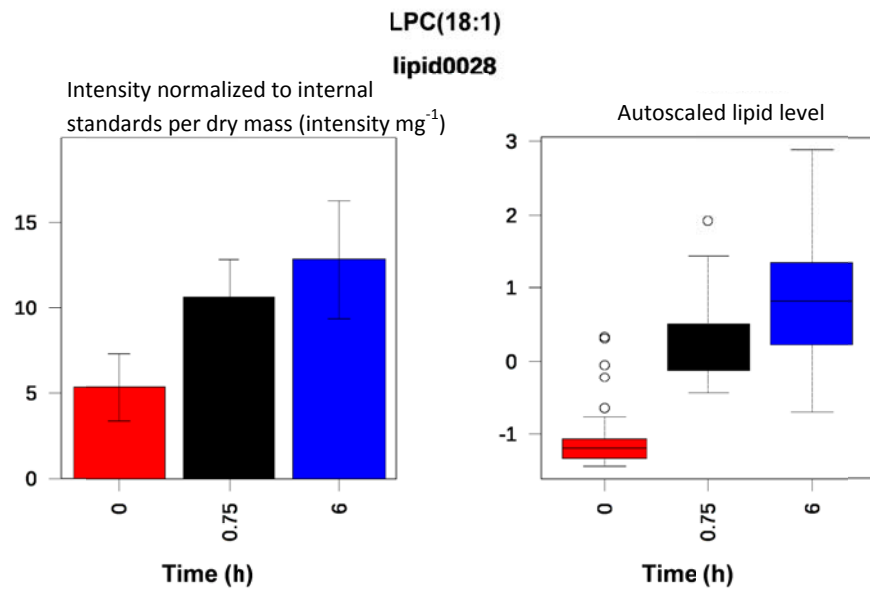
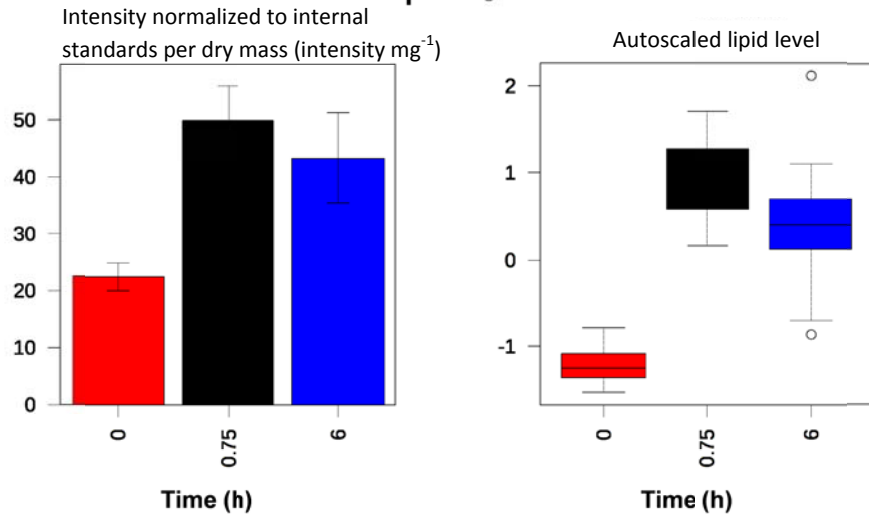


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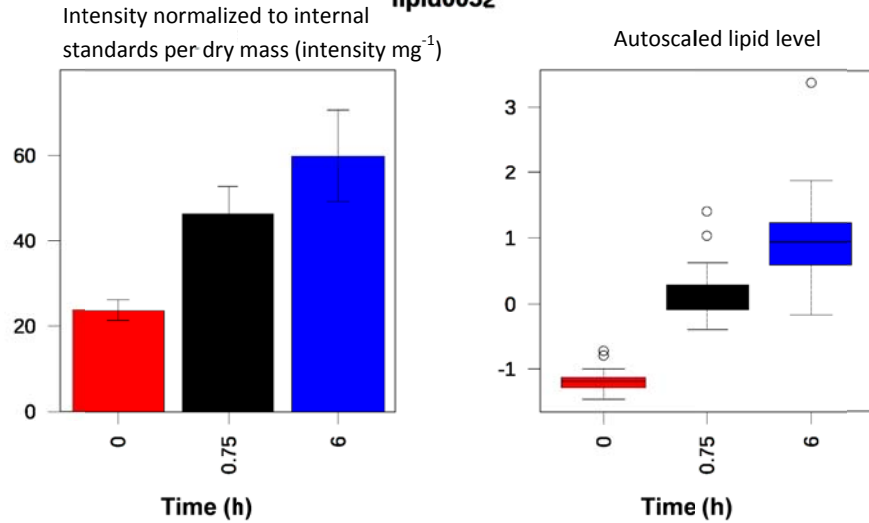
LPC(18:3)

lipid0026



LPE(16:0)

lipid0052



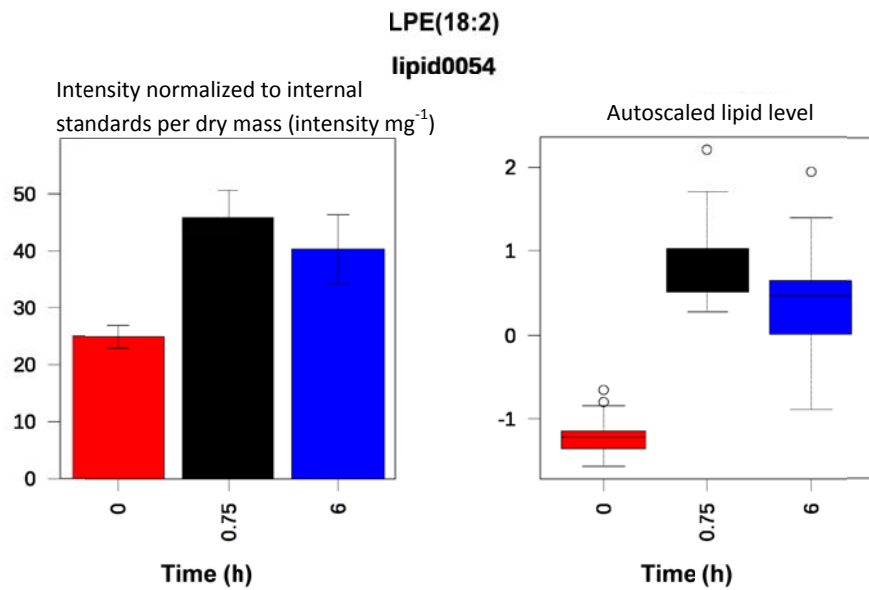
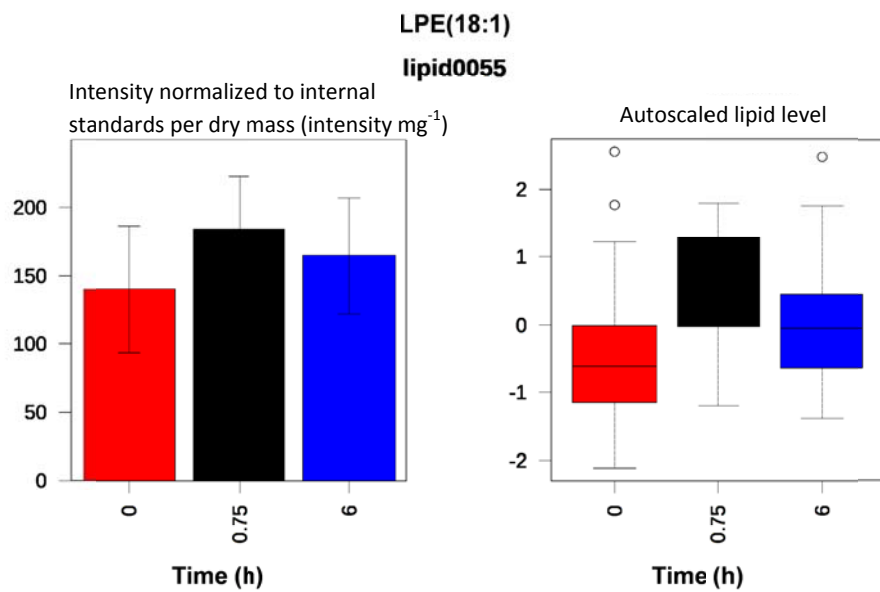


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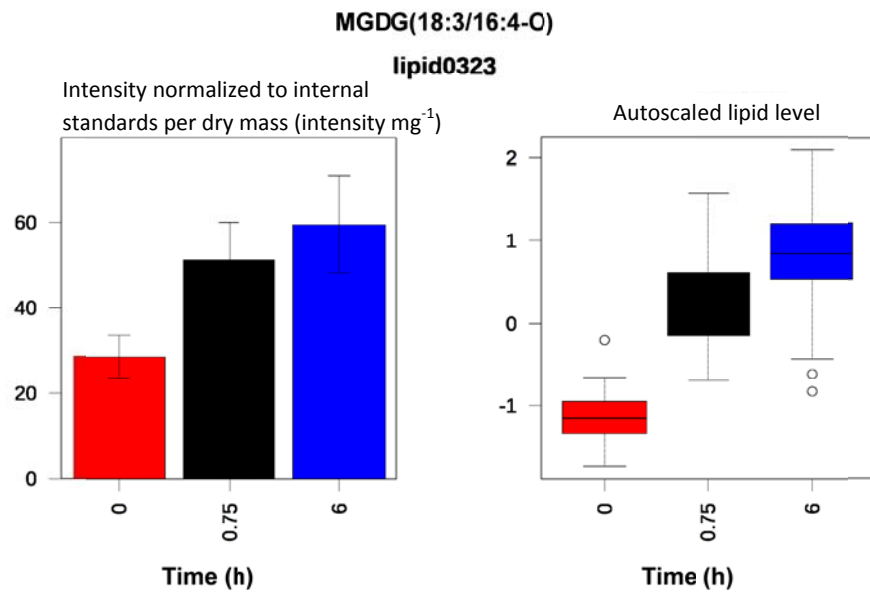
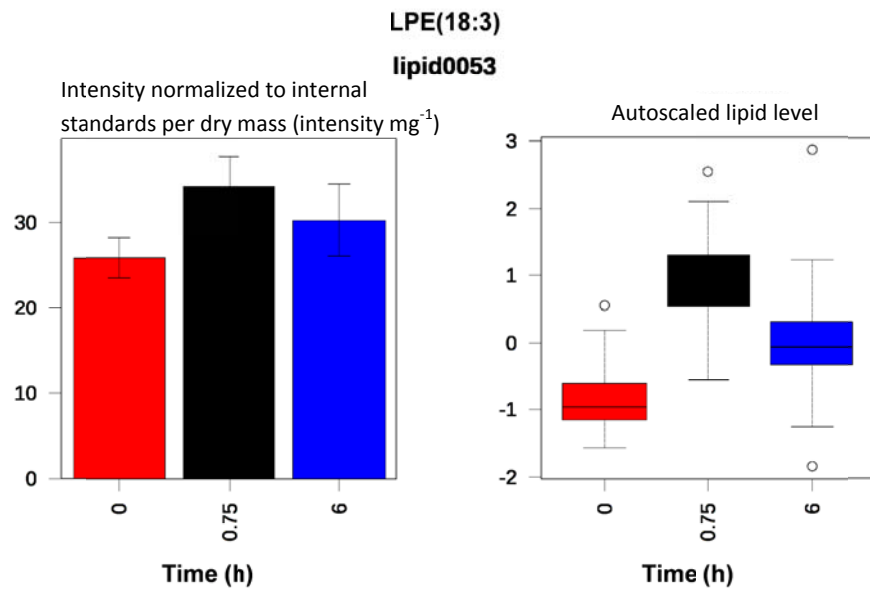
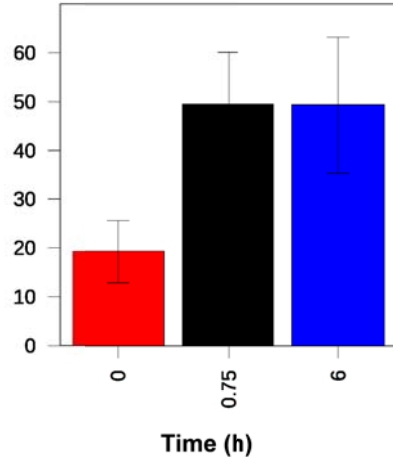


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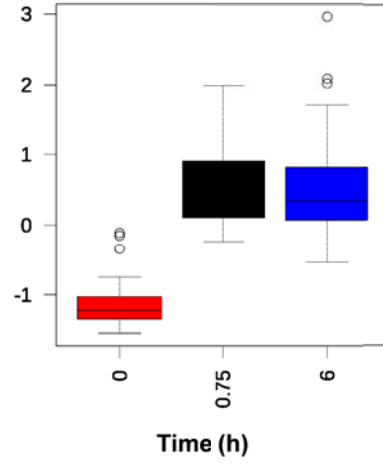
MGDG(18:3-O/16:4-O)

lipid0625

Intensity normalized to internal standards per dry mass (intensity mg^{-1})



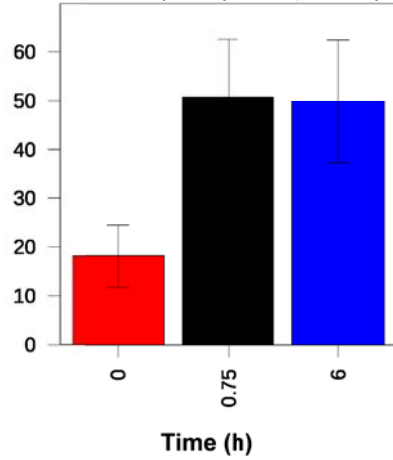
Autoscaled lipid level



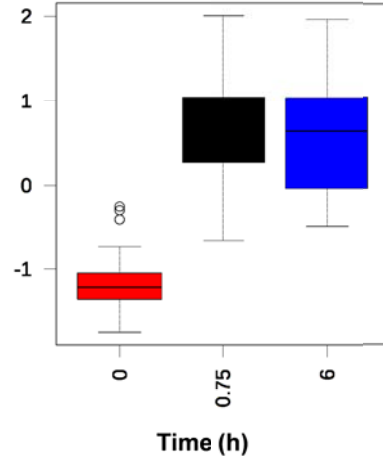
MGDG(18:3-2O/16:3)

lipid0370

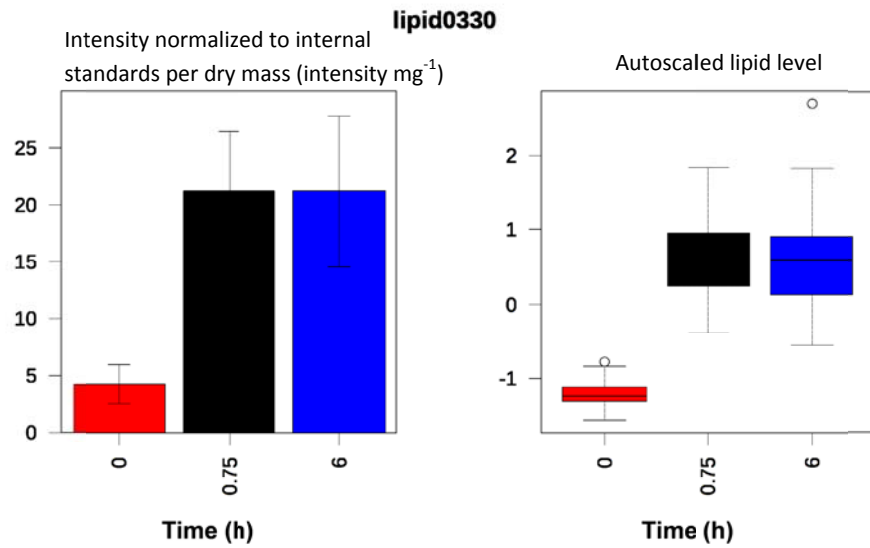
Intensity normalized to internal standards per dry mass (intensity mg^{-1})



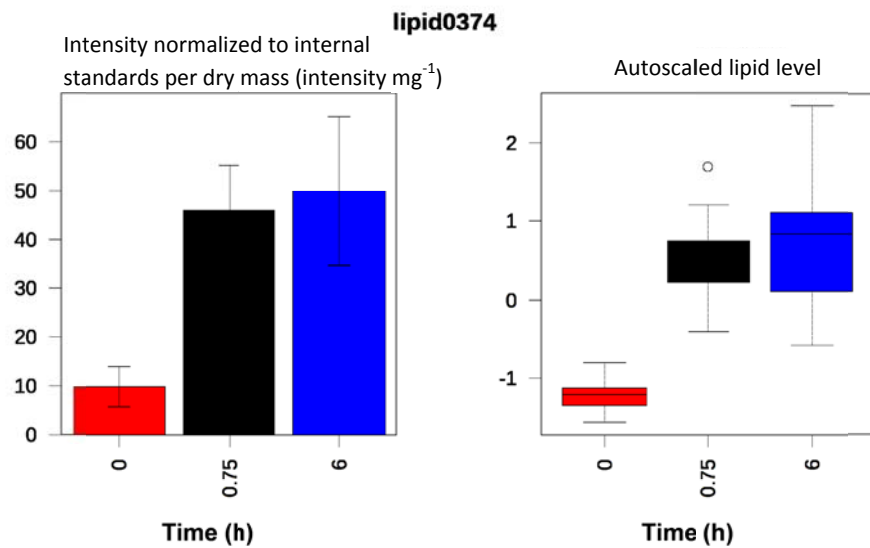
Autoscaled lipid level



MGDG(18:3-2O/16:4-O) or MGDG(20:1/16:4-O) (16:4-O as fragment)

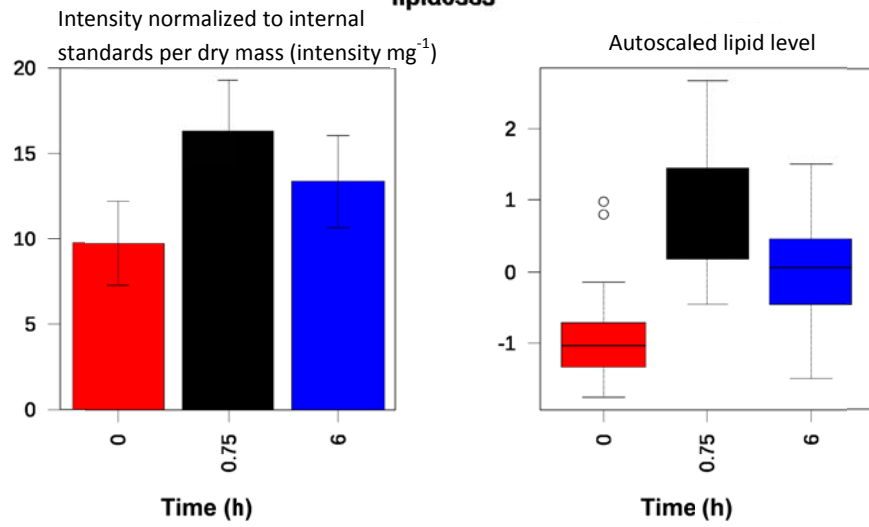


MGDG(18:3-2O/16:4-O) (18:4-O as fragment)



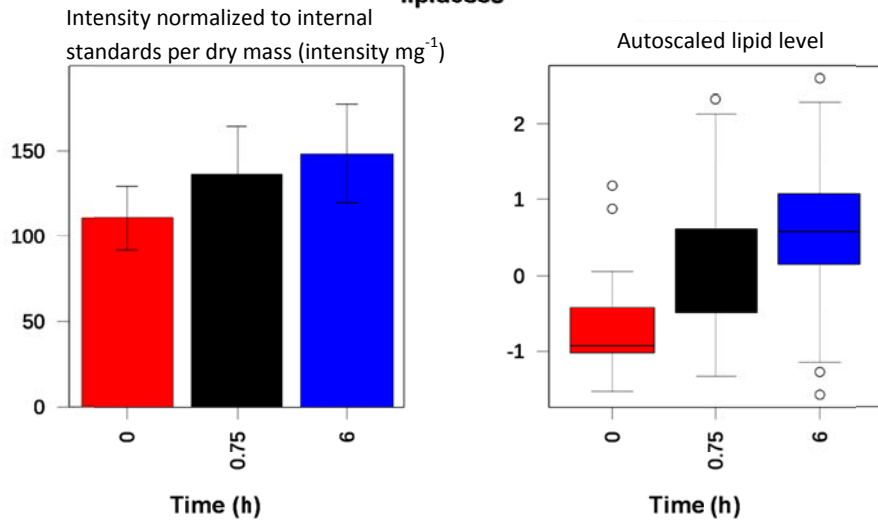
MGDG(18:3-2O/18:3-O)

lipid0383



MGDG(18:4-O/16:3)

lipid0358



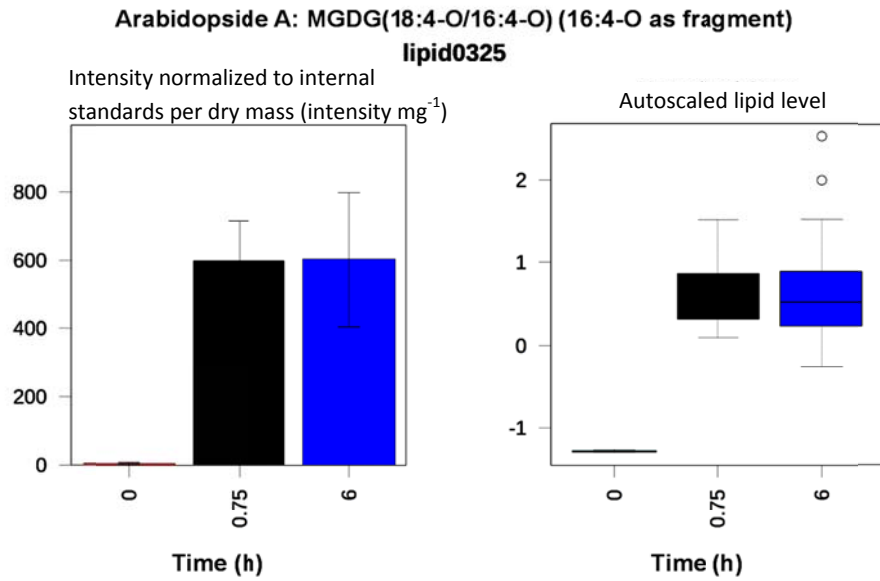
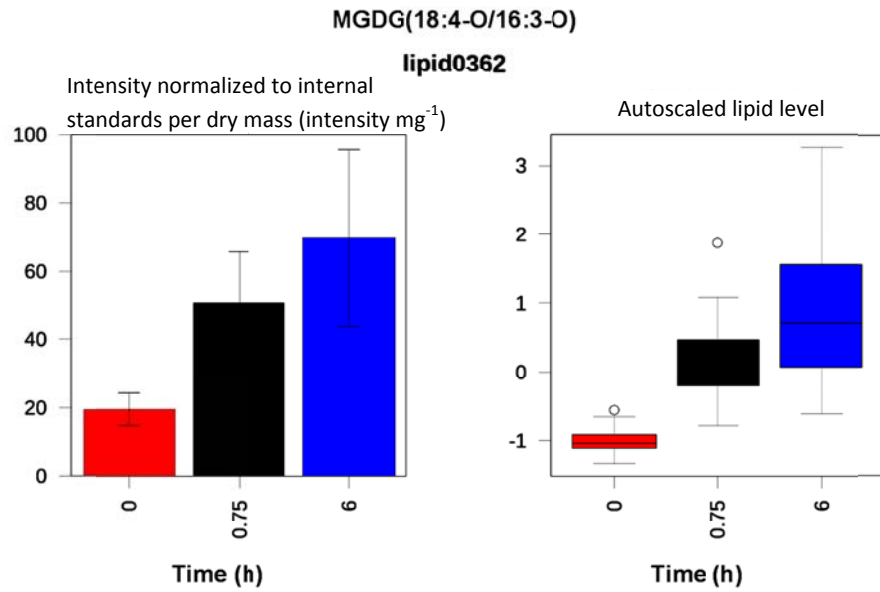
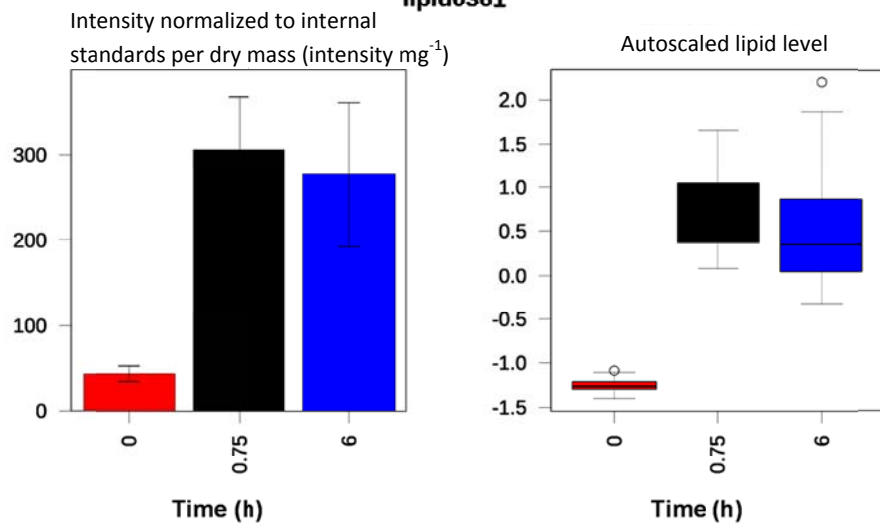
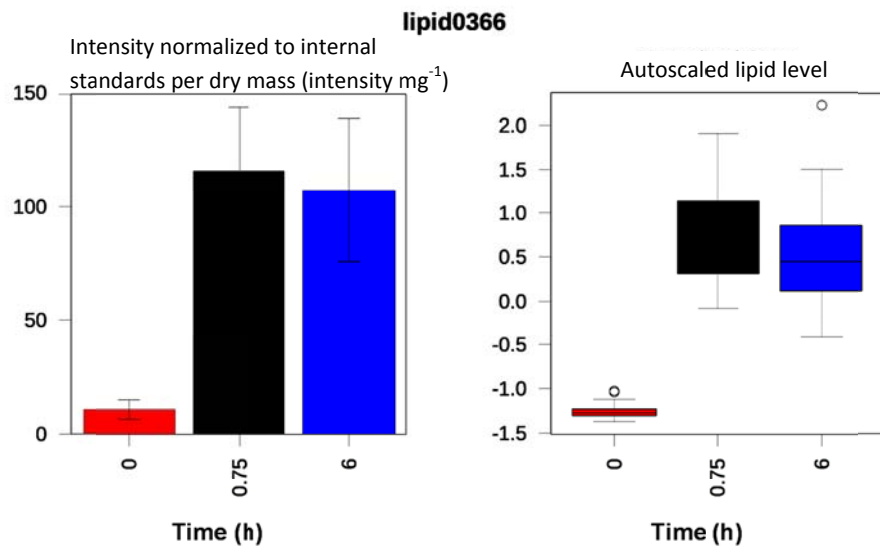


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**Arabidopsis A: MGDG(18:4-O/16:4-O) (18:4-O as fragment)
lipid0361**

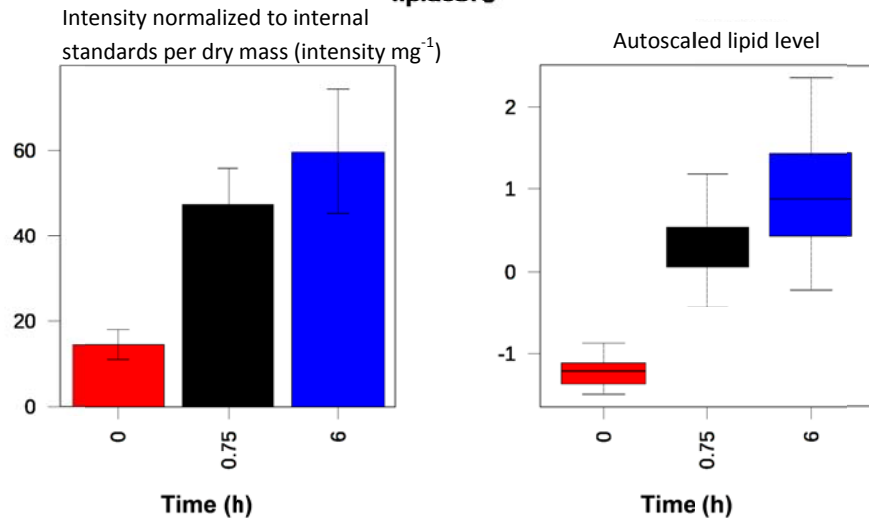


MGDG(18:4-O/18:1) or MGDG(18:4-O/16:3-2O)



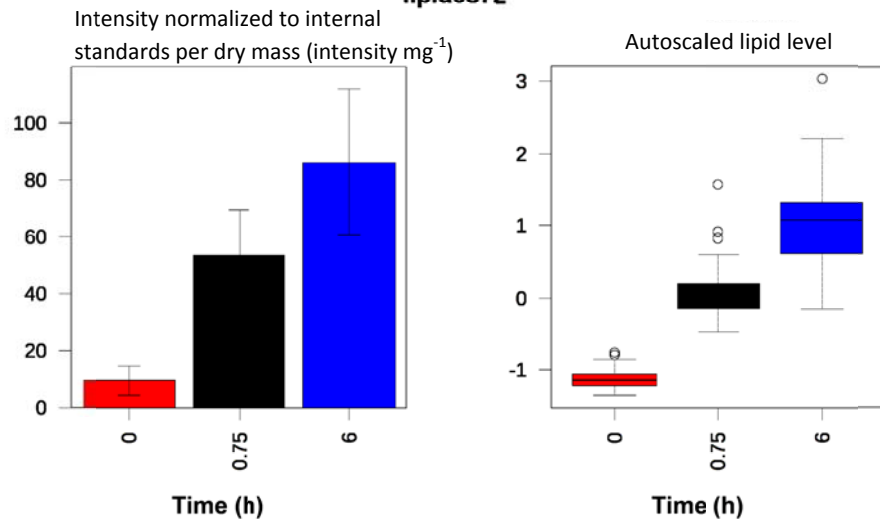
MGDG(18:4-O/18:2)

lipid0373



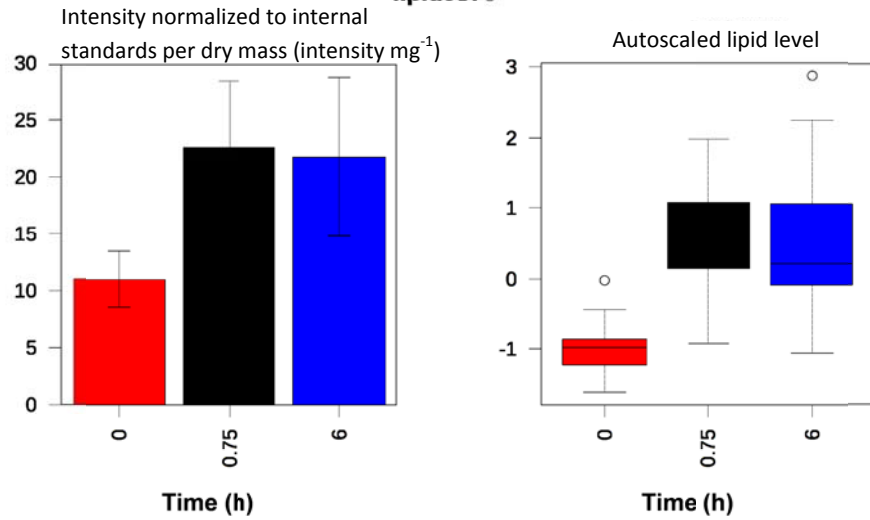
MGDG(18:4-O/18:3)

lipid0372



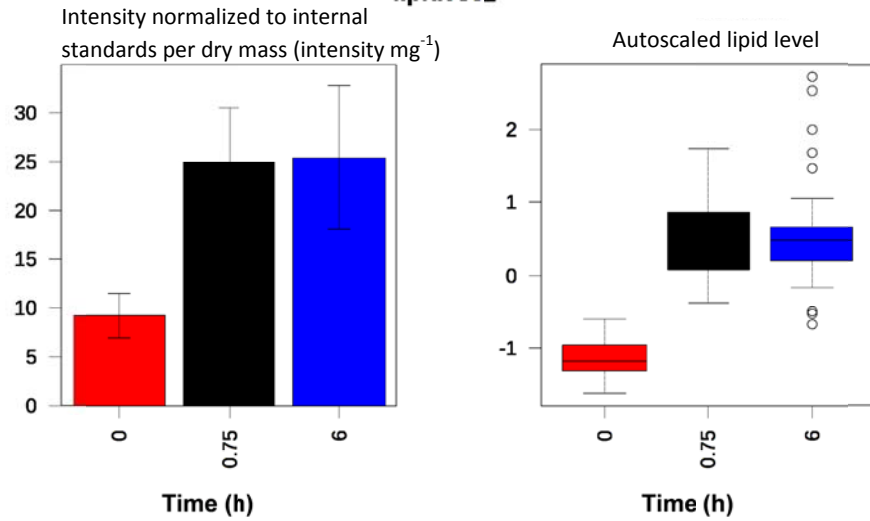
MGDG(18:4-O/18:3-O)

lipid0376



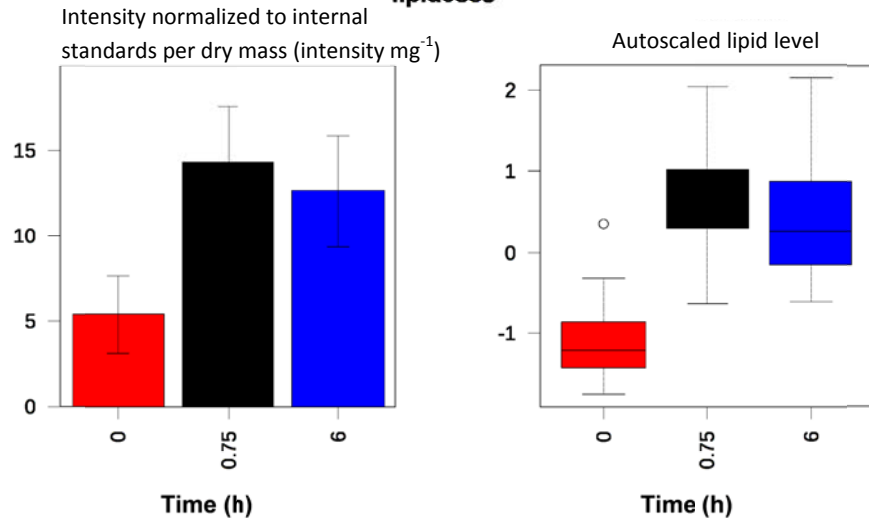
MGDG(18:4-O/18:3-2O) or MGDG(18:4-O/20:3)

lipid0382



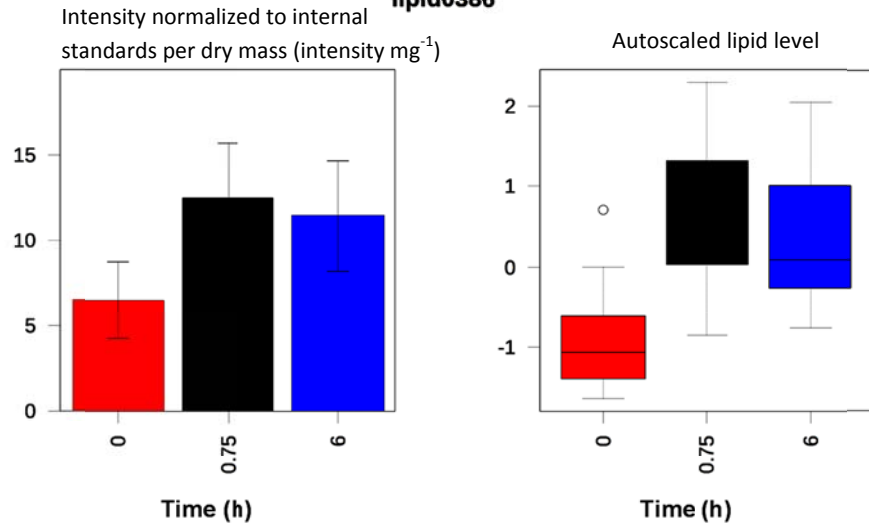
MGDG(18:4-O/18:3-3O)

lipid0385



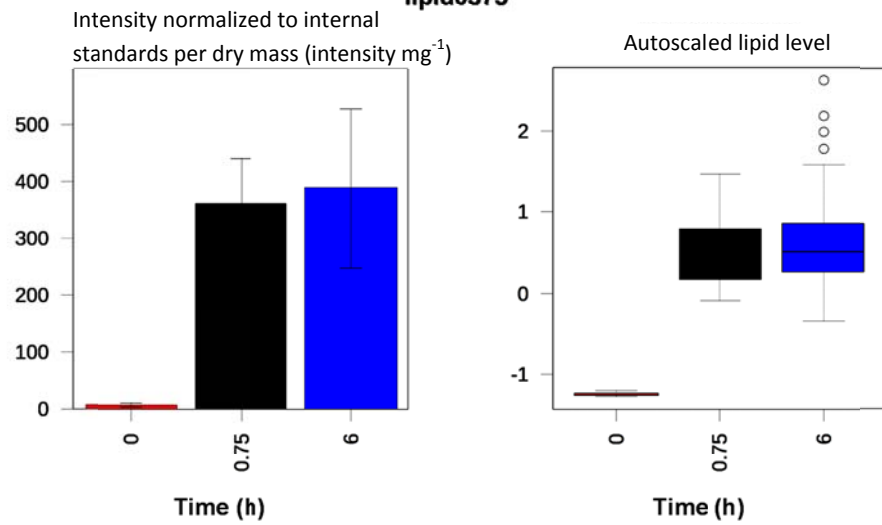
MGDG(18:4-O/18:3-4O)

lipid0386



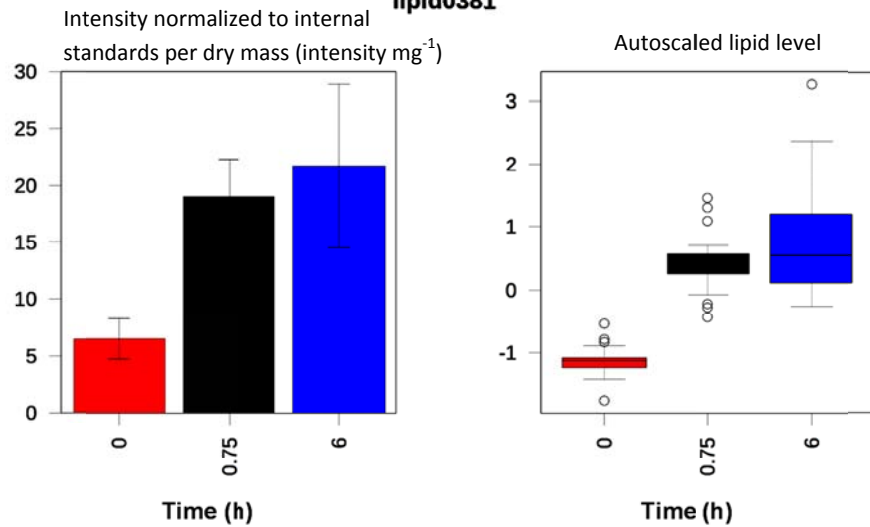
Arabidopsis B: MGDG(18:4-O/18:4-O)

lipid0375



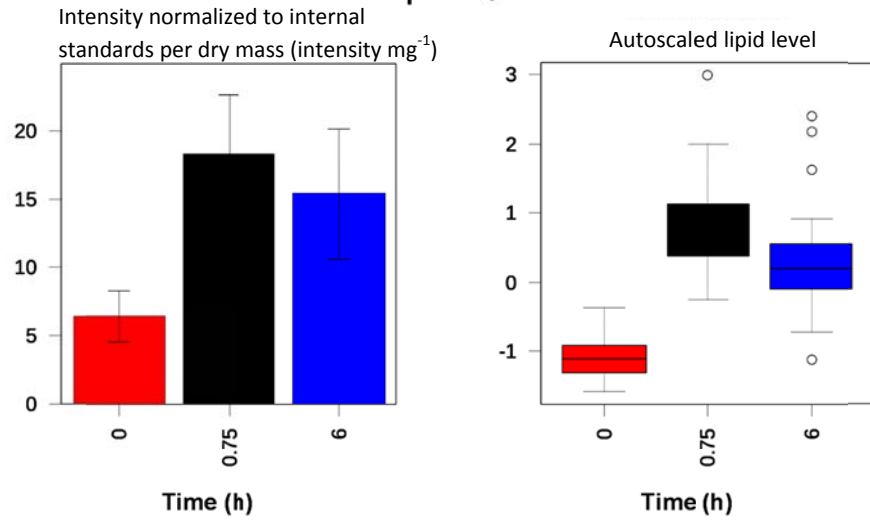
MGDG(18:4-O/18:4-2O)

lipid0381



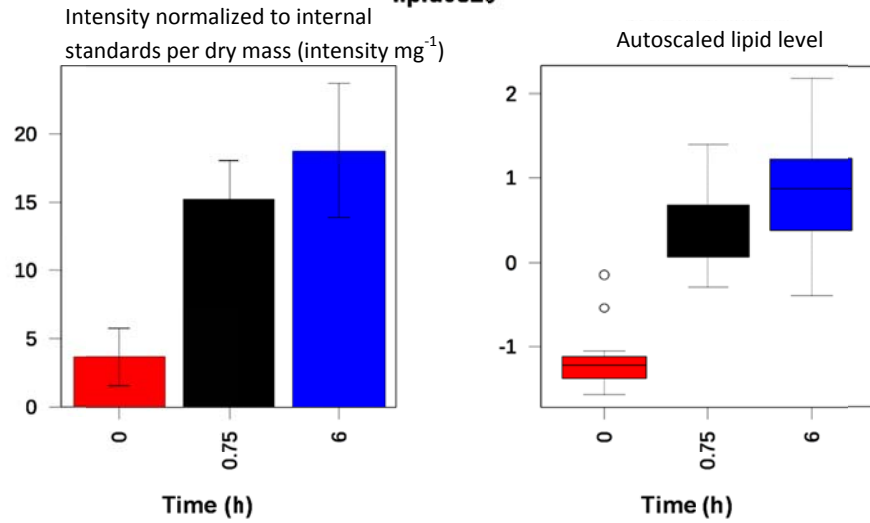
MGDG(18:4-O/18:4-3O)

lipid0384



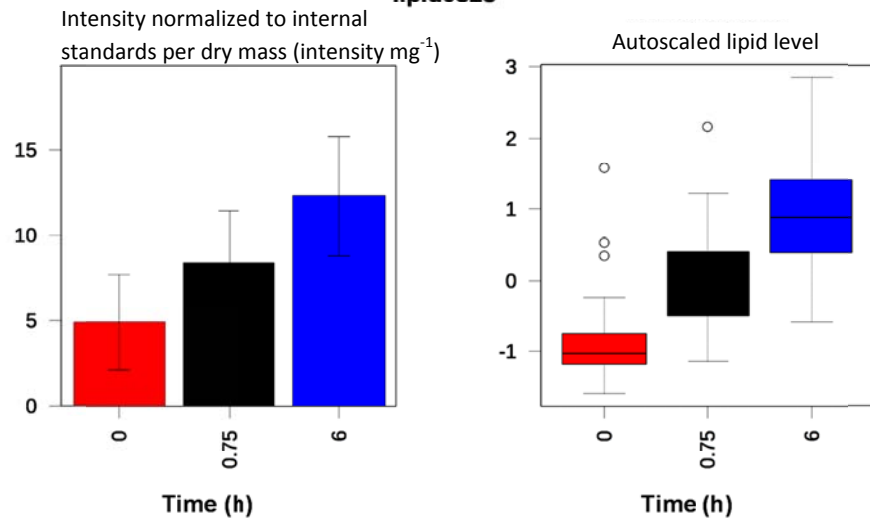
MGDG(18:4-2O/16:4-O) or MGDG(20:2/16:4-O)

lipid0329



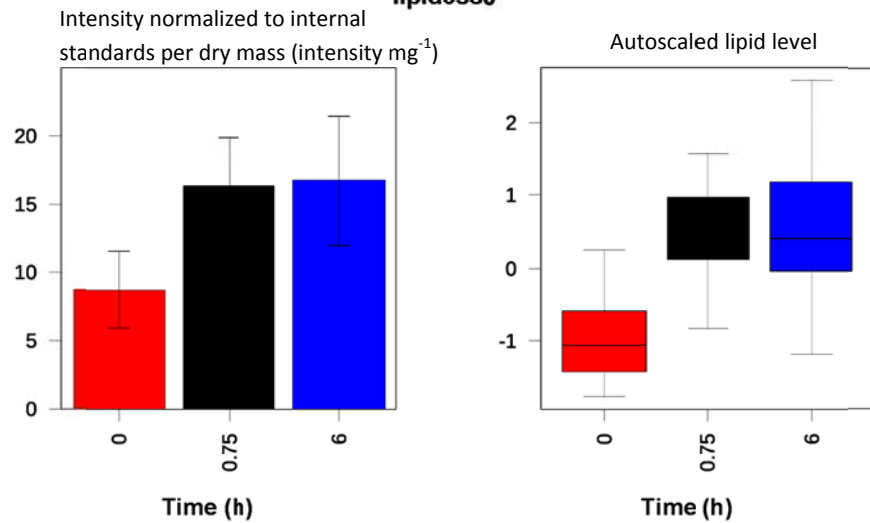
MGDG(18:5-20/16:4-O) or MGDG(20:3/16:4-O)

lipid0328



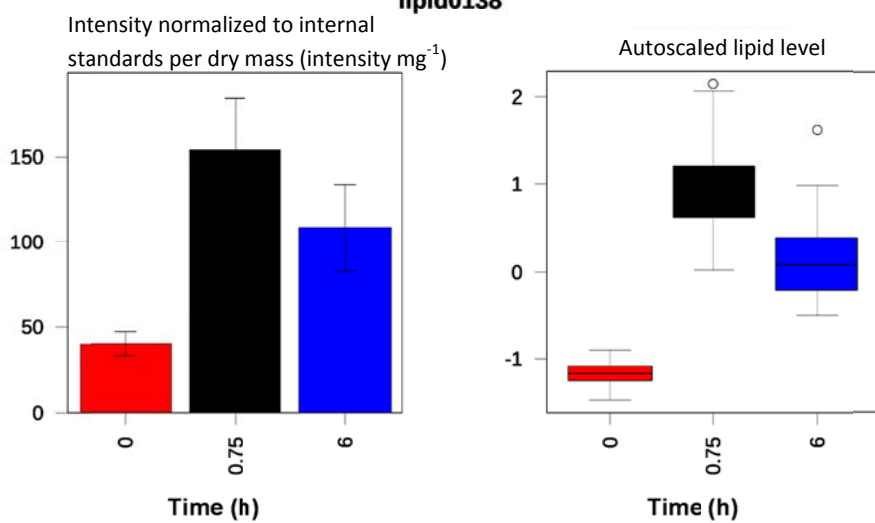
MGDG(18:5-20/18:4-O) or MGDG(20:3/18:4-O)

lipid0380



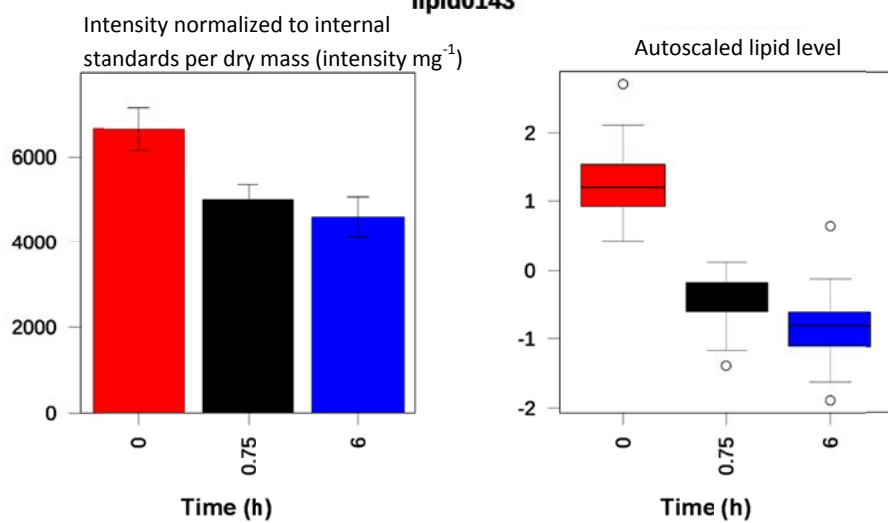
MGDG(30:6-O)

lipid0138



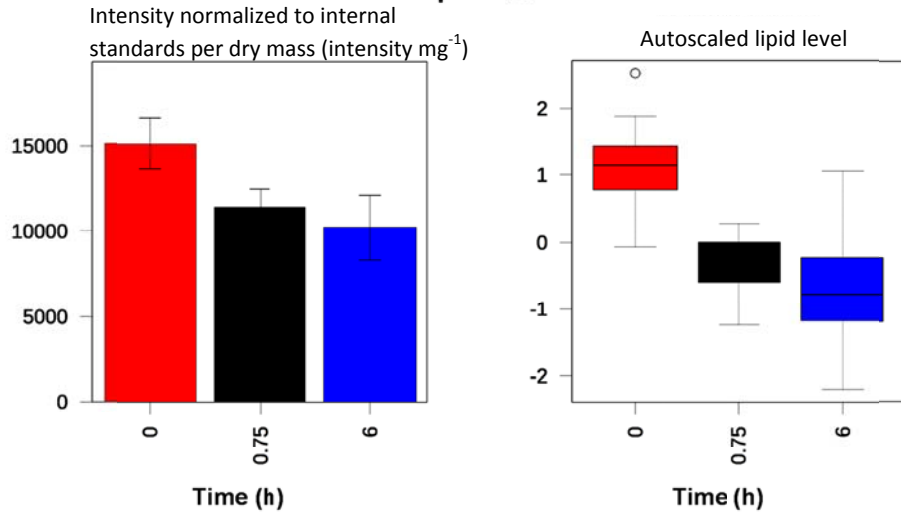
MGDG(34:3)

lipid0143



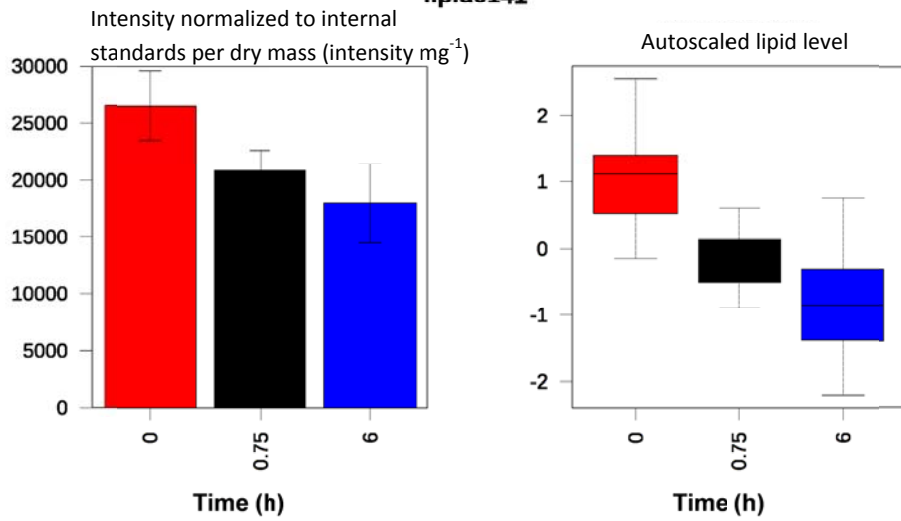
MGDG(34:4)

lipid0142



MGDG(34:5)

lipid0141



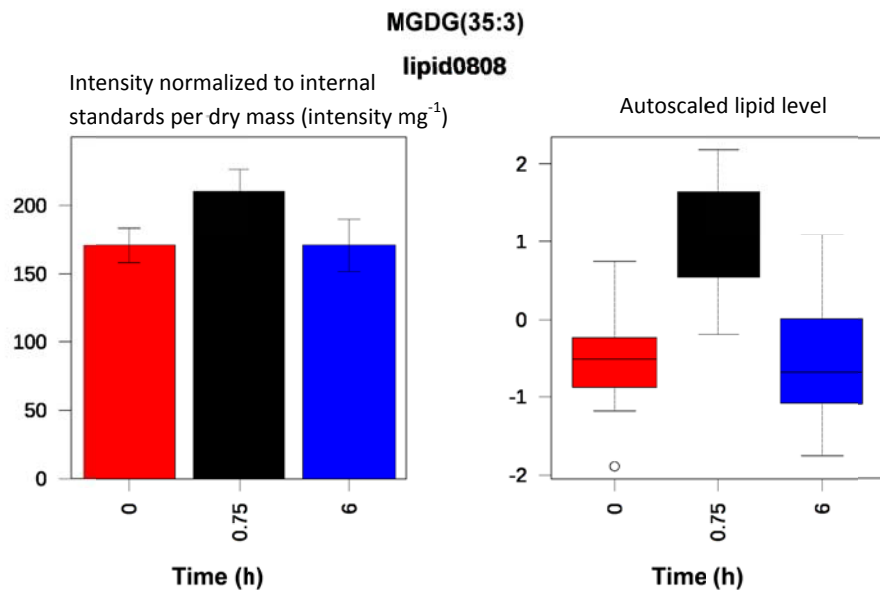
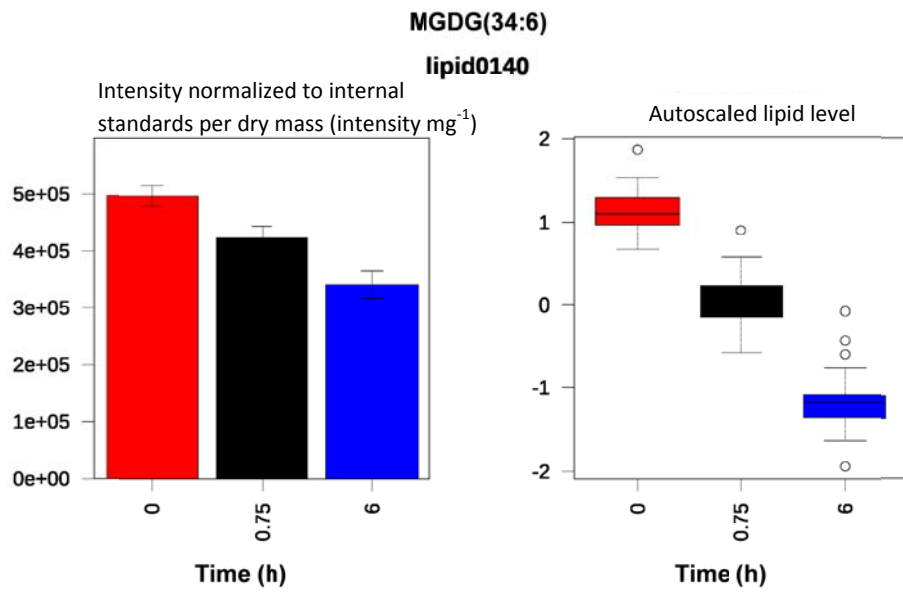


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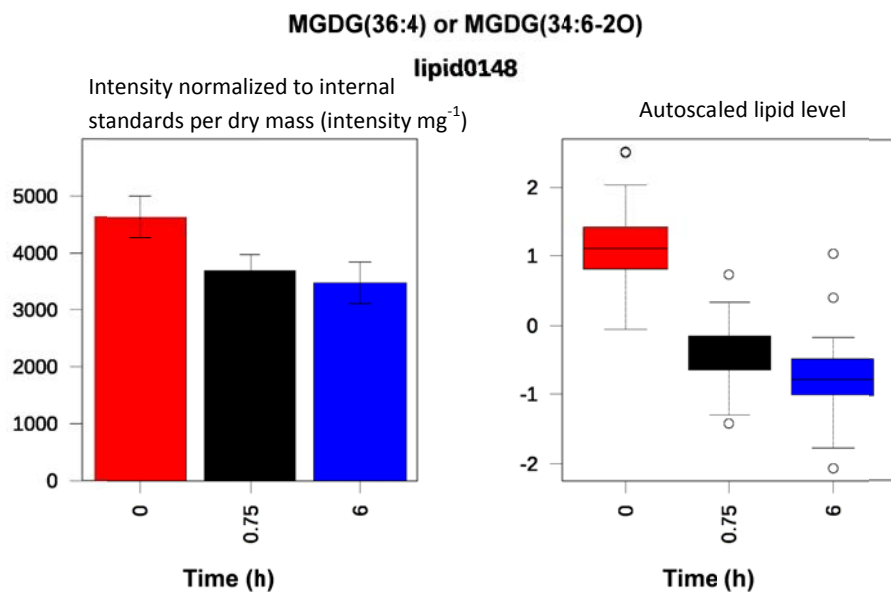
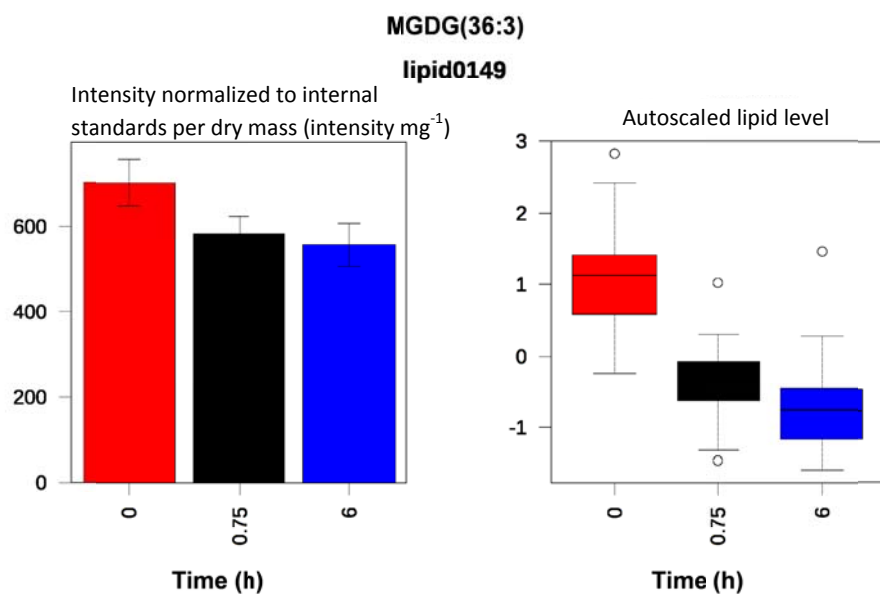
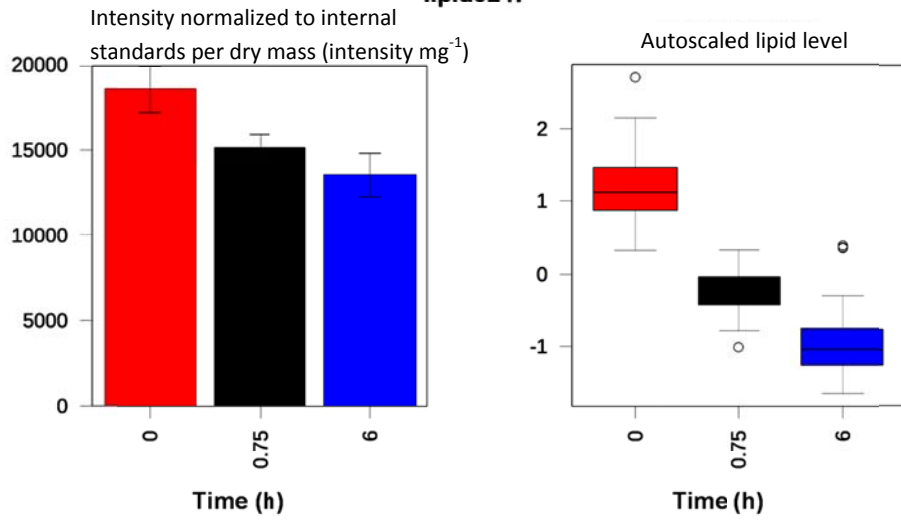


Figure S4.5 – page 72

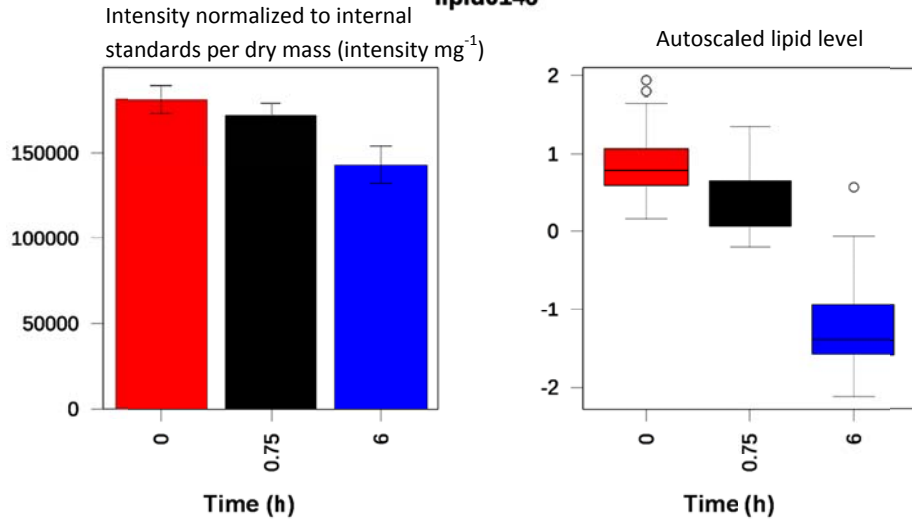
MGDG(36:5) or MGDG(34:7-20)

lipid0147



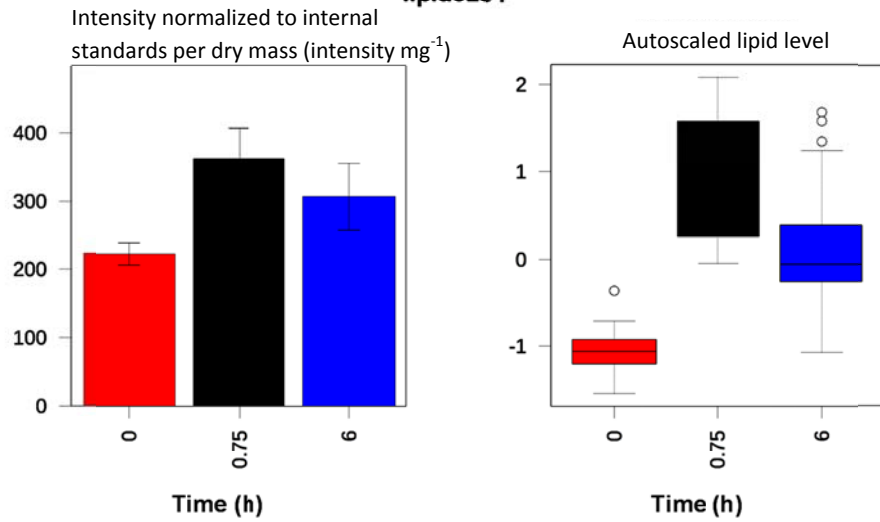
MGDG(36:6) or MGDG(34:8-20)

lipid0146



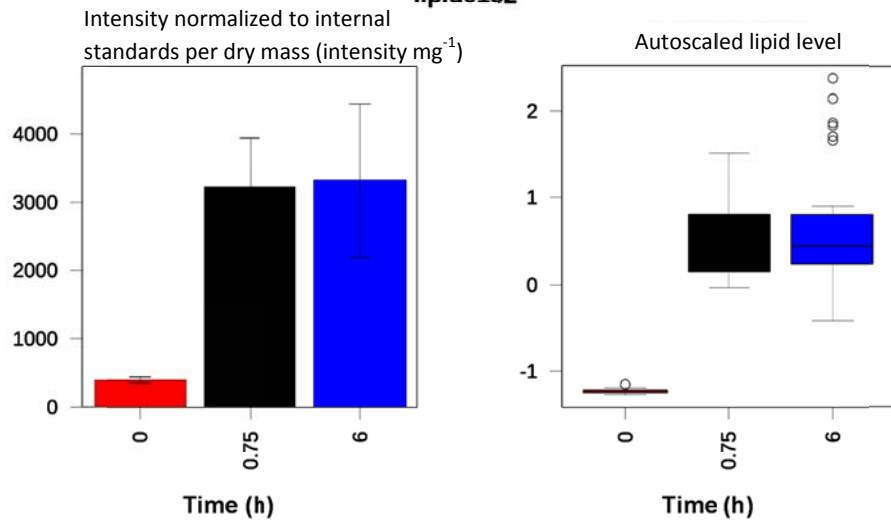
MGDG(36:6-20) or MGDG(38:4)

lipid0154



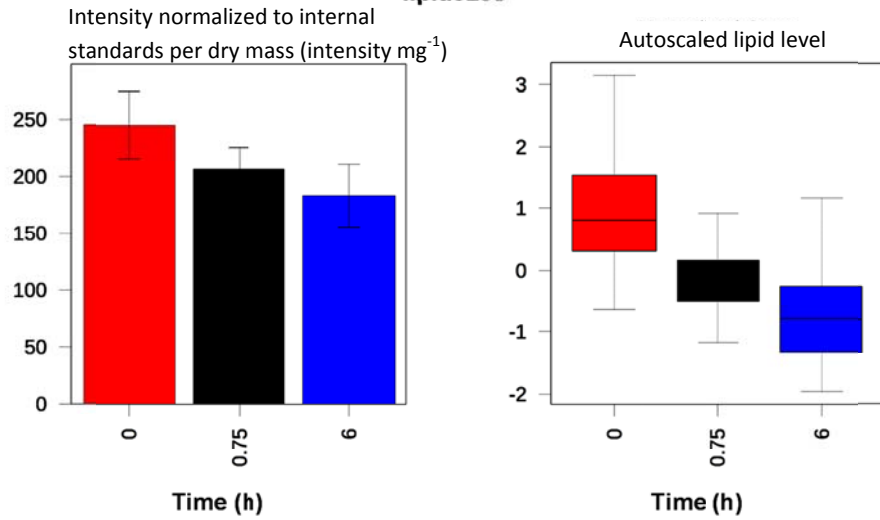
MGDG(36:8-20) or MGDG(38:6)

lipid0152



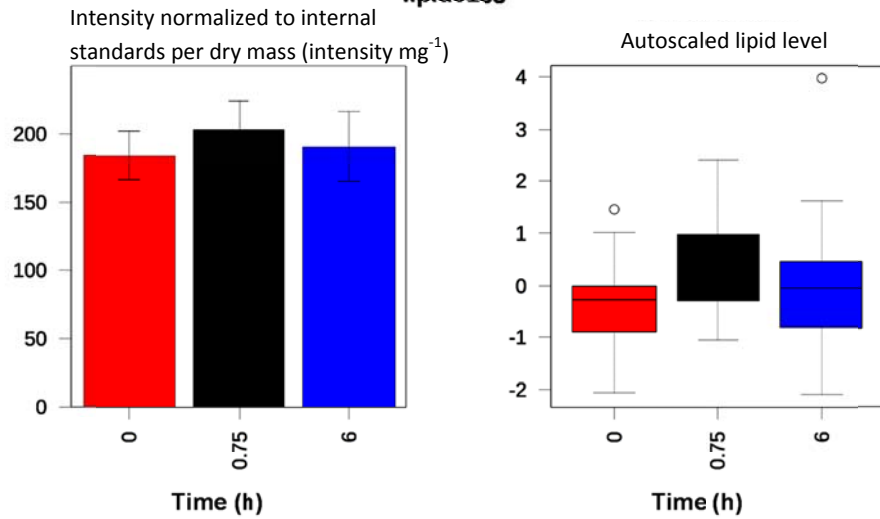
MGDG(38:5) or MGDG(36:7-20)

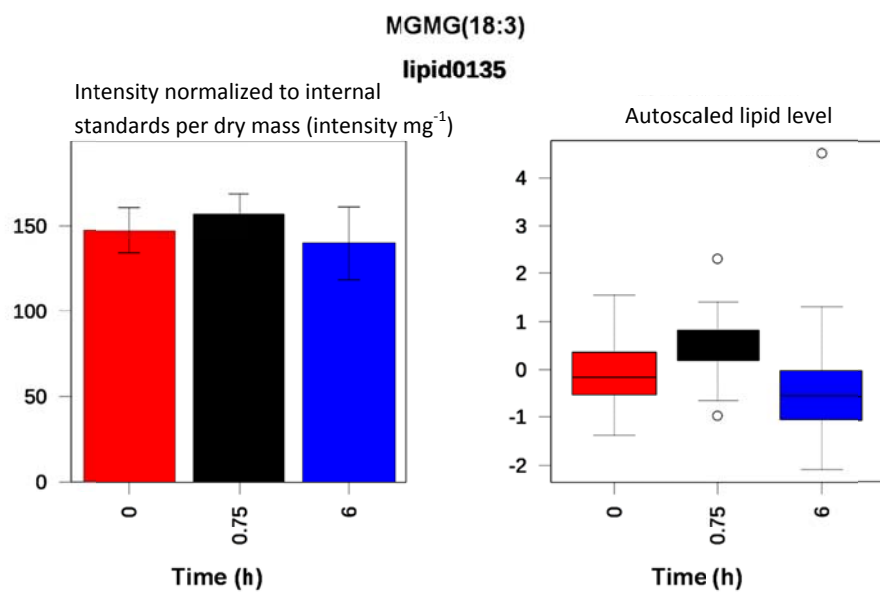
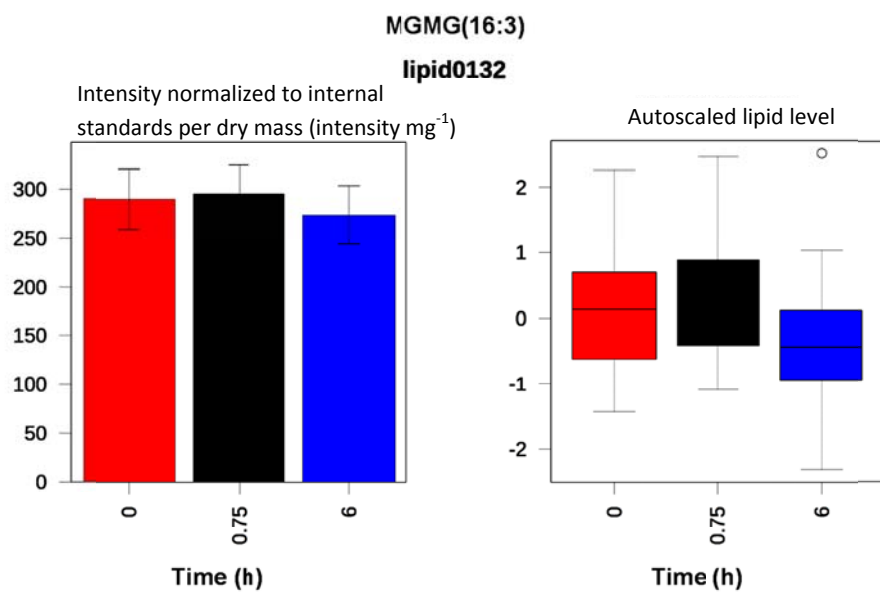
lipid0153



MGMG(16:0)

lipid0133





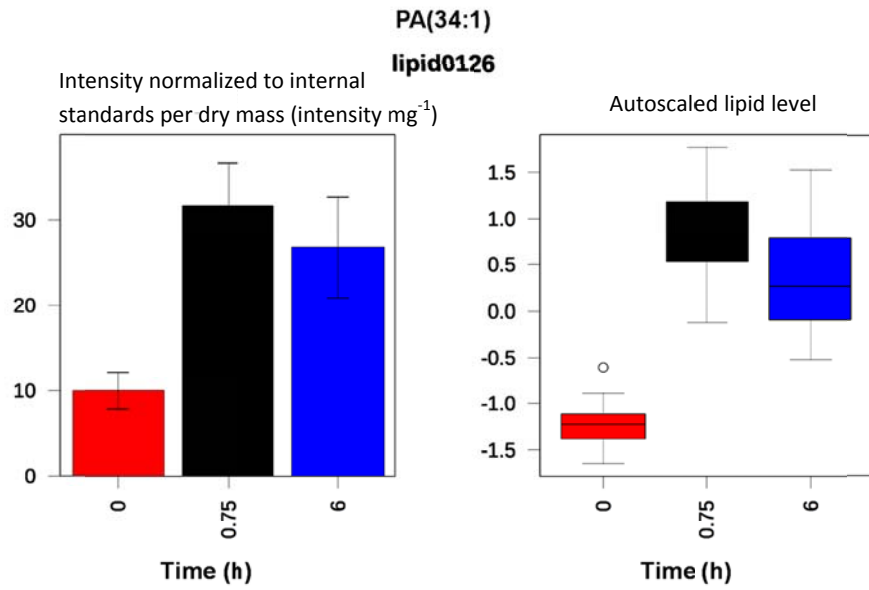
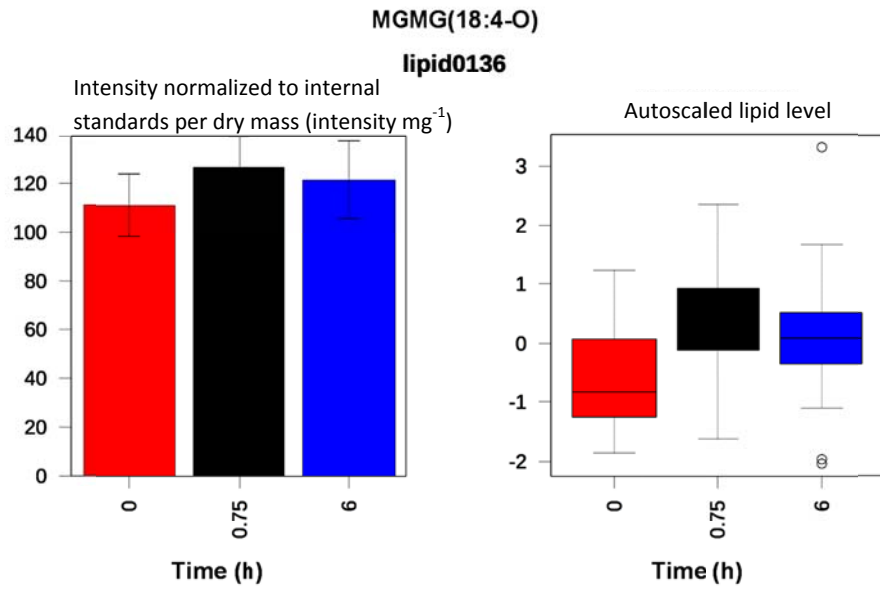


Figure S4.5 – page 77

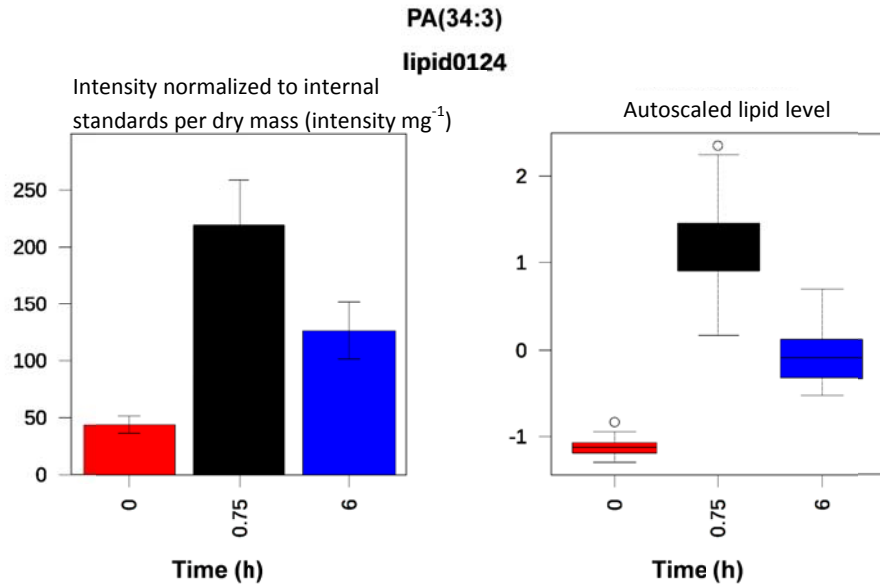
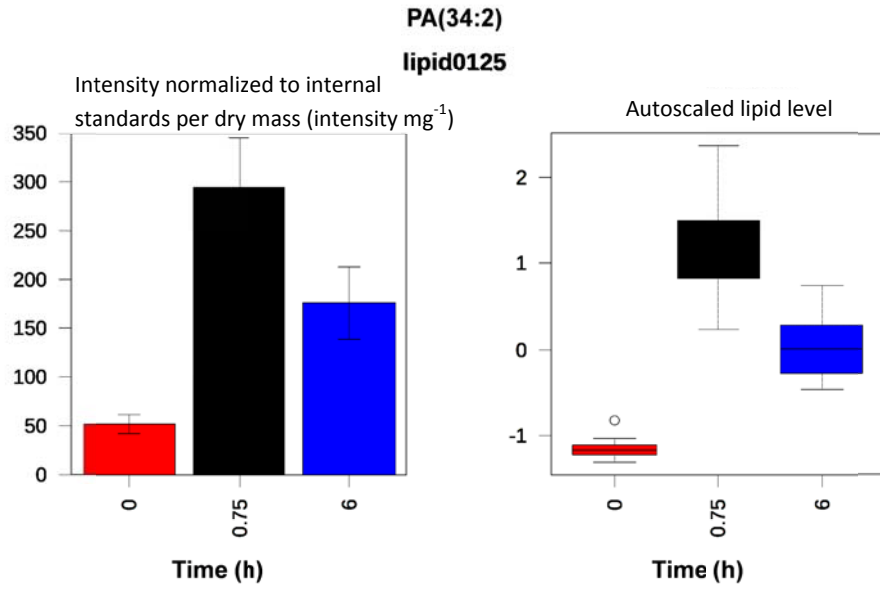
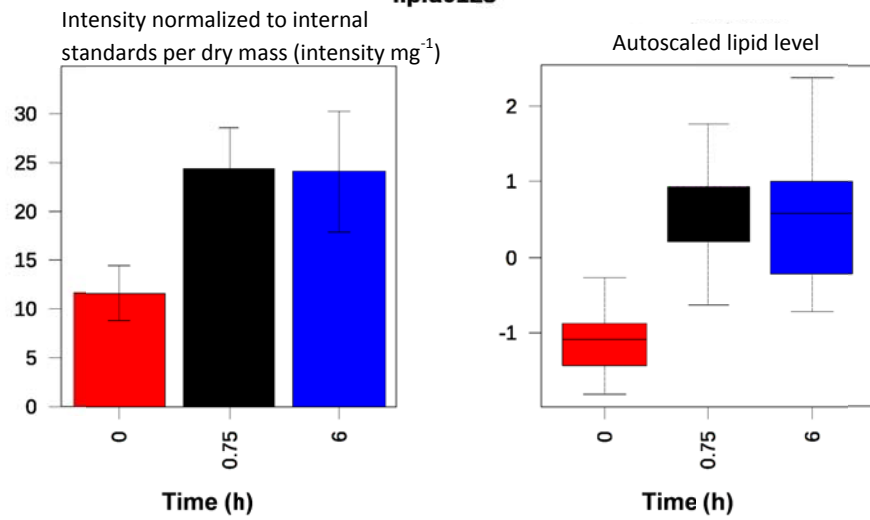


Figure S4.5 – page 78

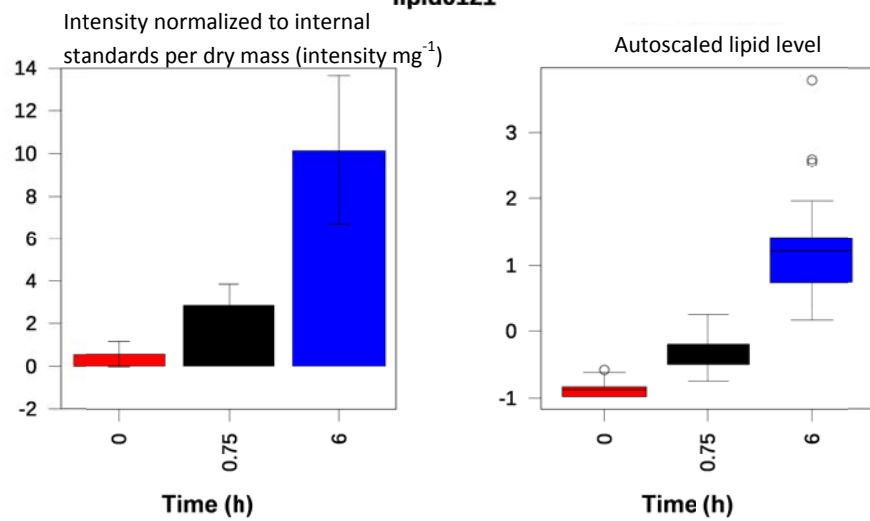
PA(34:4)

lipid0123



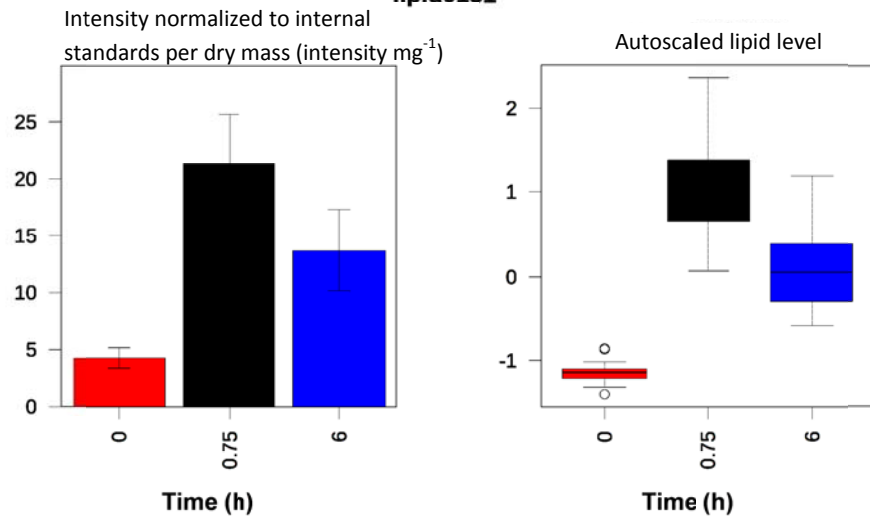
PA(34:6)

lipid0121



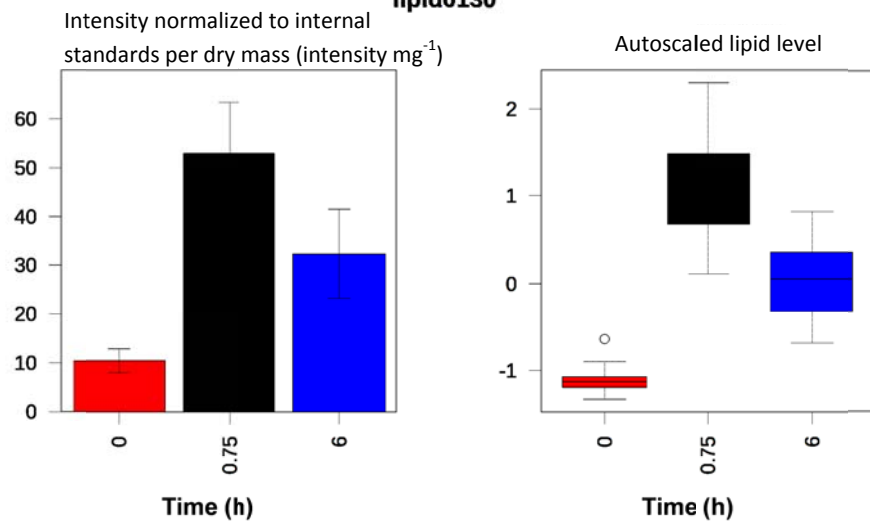
PA(36:2)

lipid0131

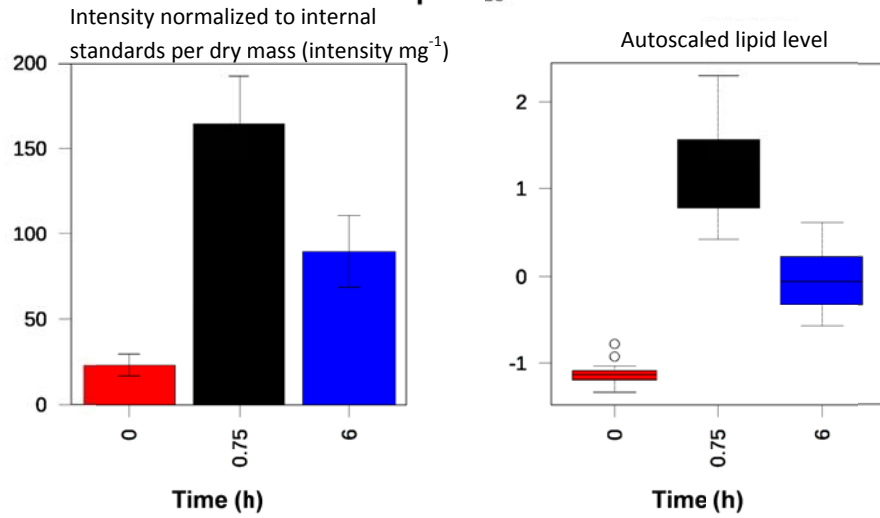


PA(36:3)

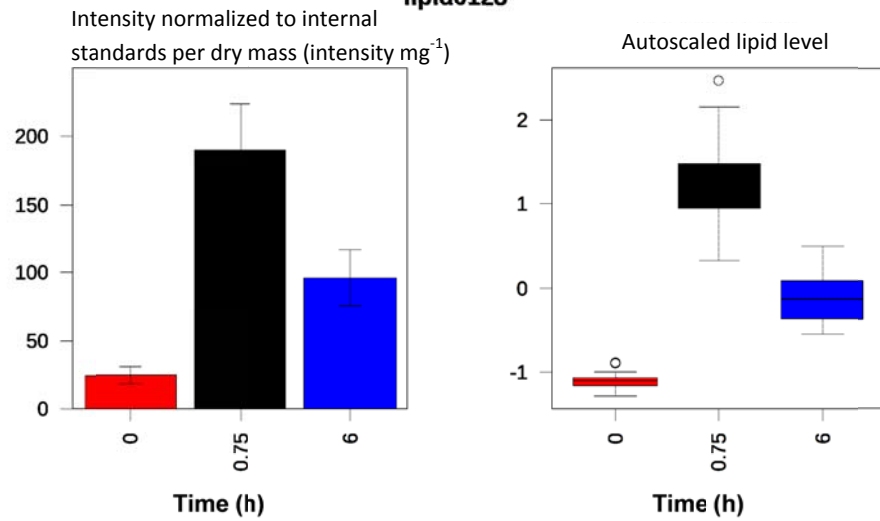
lipid0130



**PA(36:4)
lipid0129**



**PA(36:5)
lipid0128**



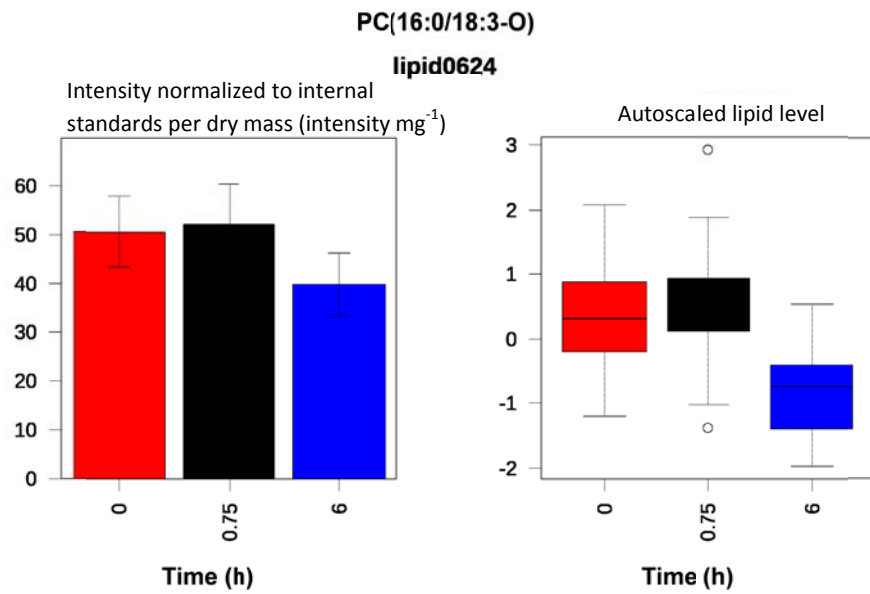
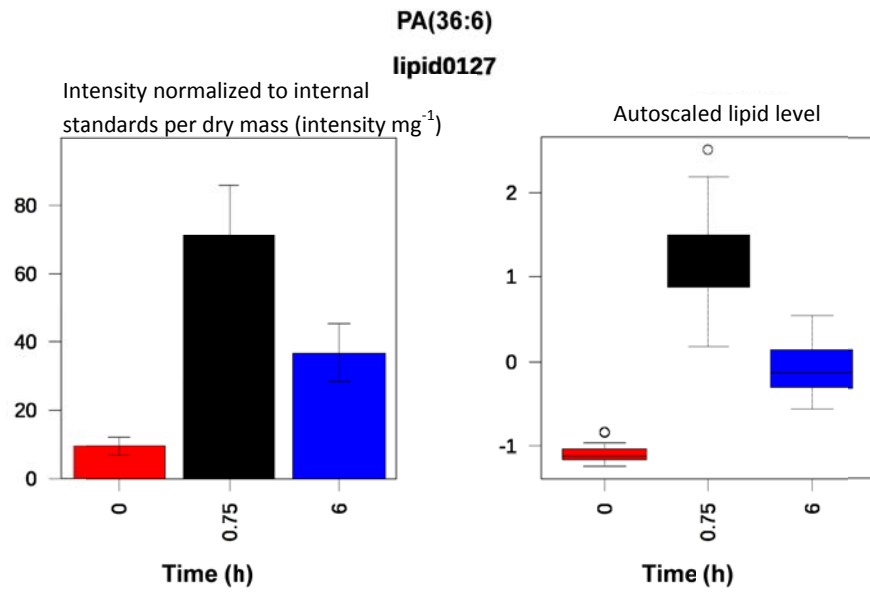
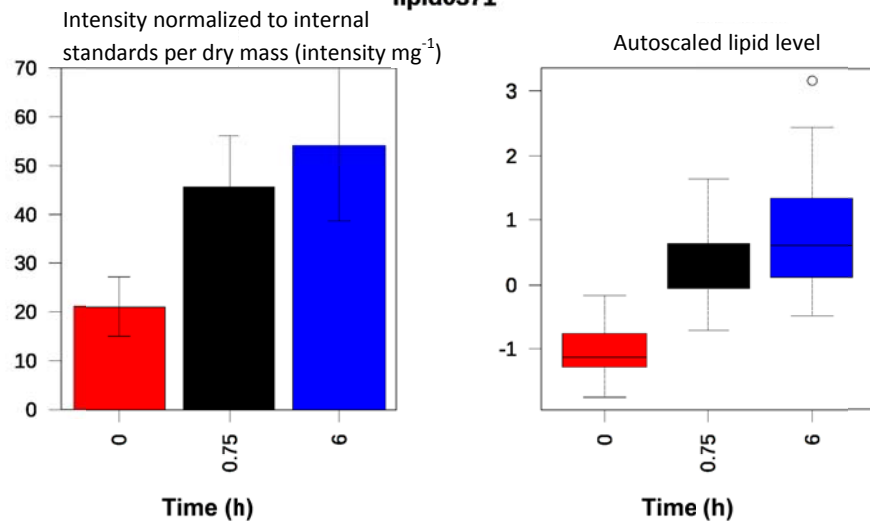


Figure S4.5 – page 82

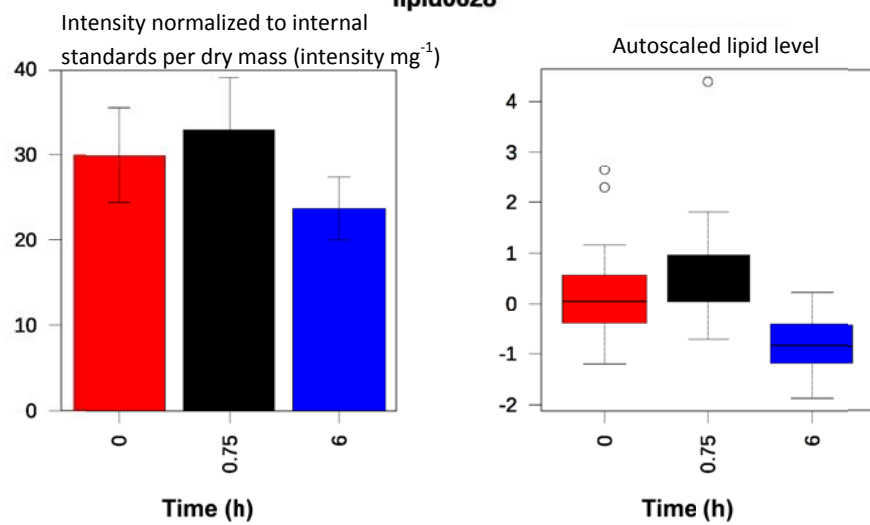
PC(16:0/18:3-2O)

lipid0371



PC(18:2/18:3-O)

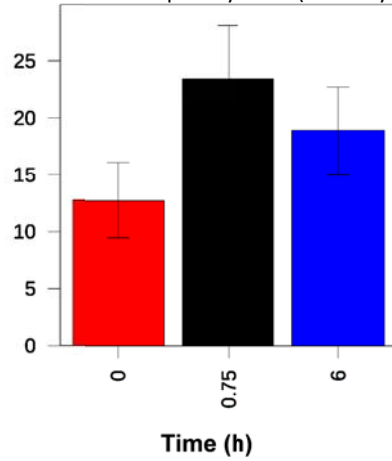
lipid0628



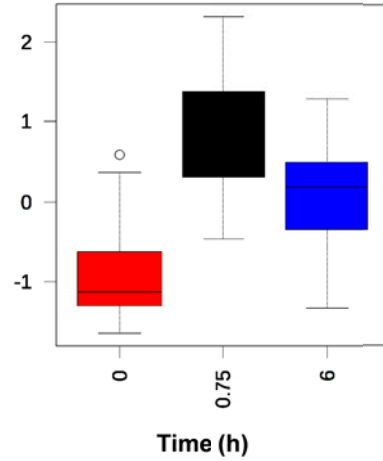
PC(18:2/18:3-2O)

lipid0379

Intensity normalized to internal standards per dry mass (intensity mg^{-1})



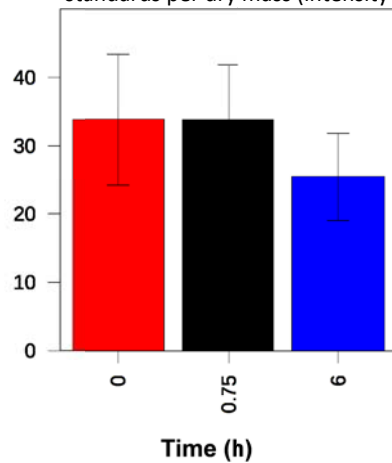
Autoscaled lipid level



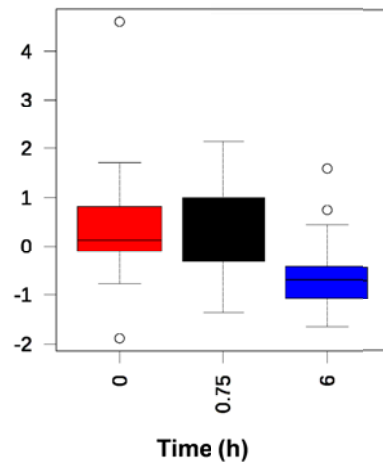
PC(18:3/18:3-O)

lipid0627

Intensity normalized to internal standards per dry mass (intensity mg^{-1})

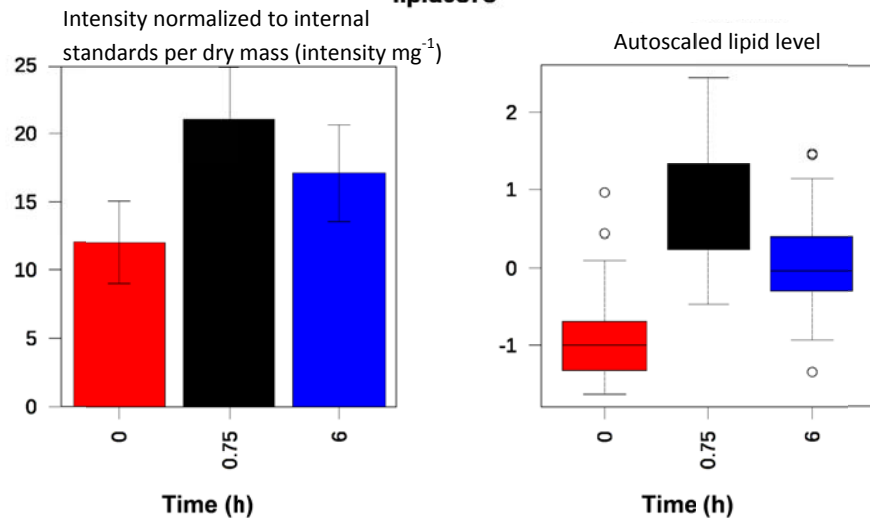


Autoscaled lipid level



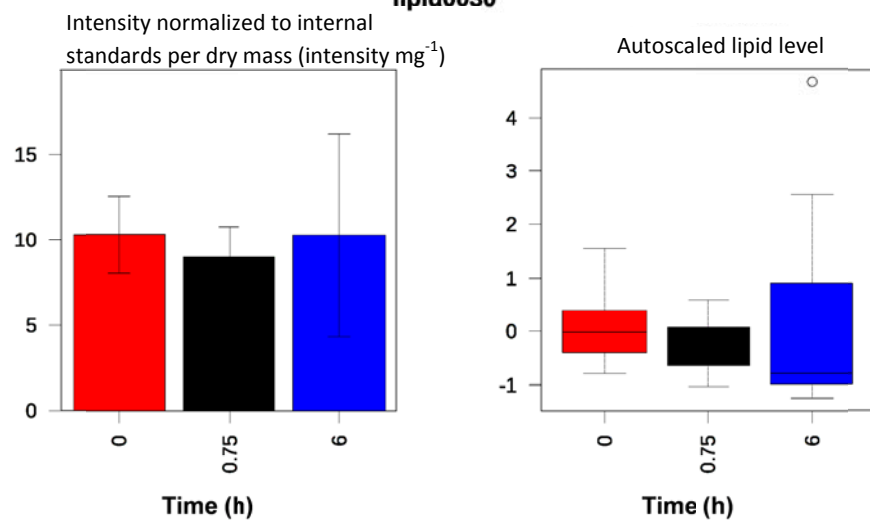
PC(18:3/18:3-20)

lipid0378



PC(32:0)

lipid0030



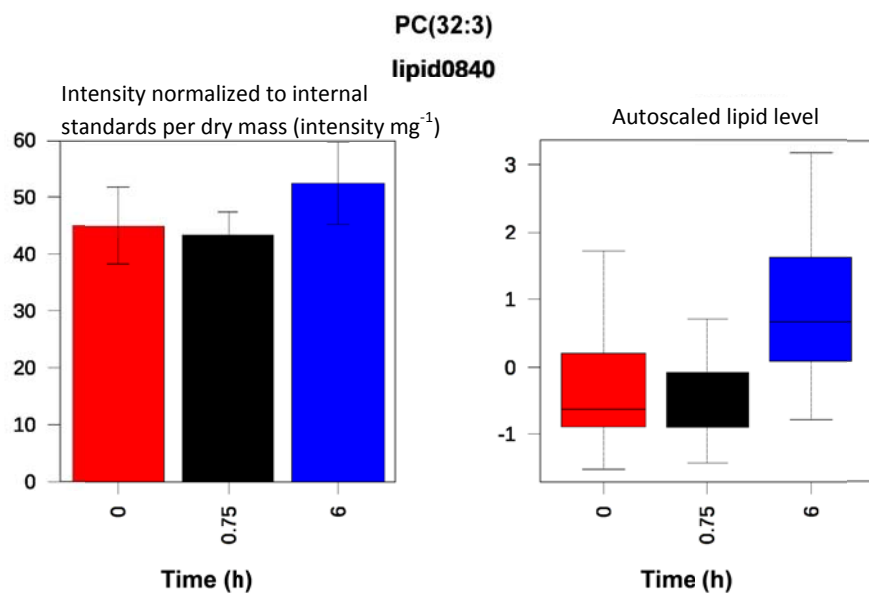
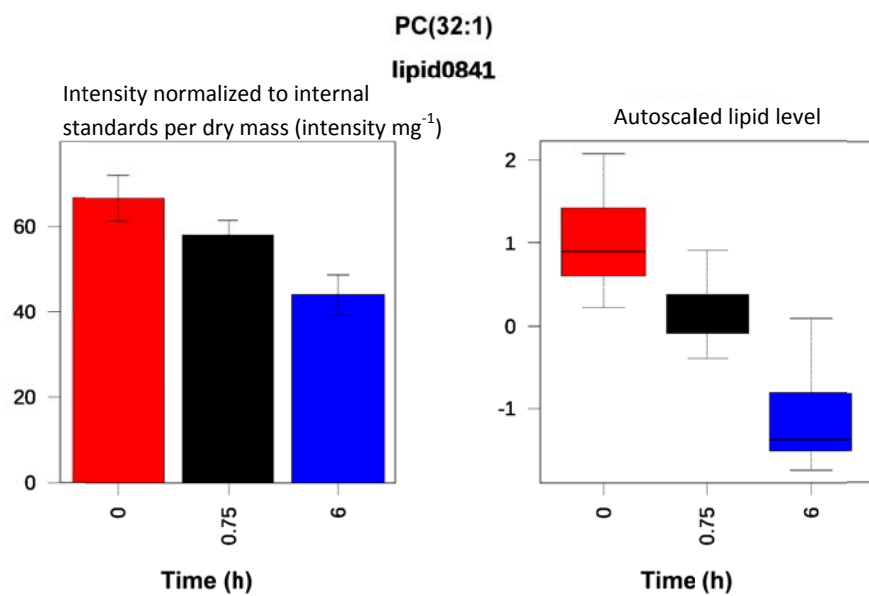


Figure S4.5 – page 86

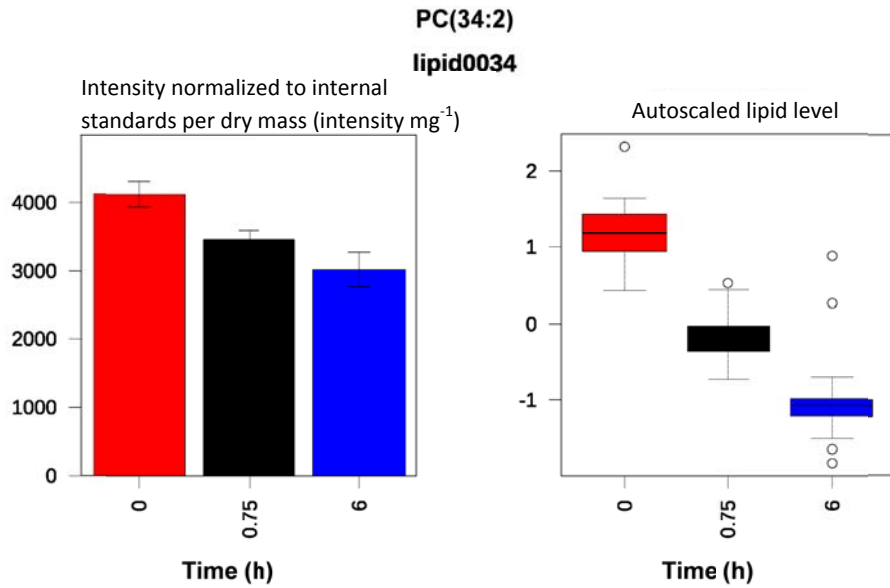
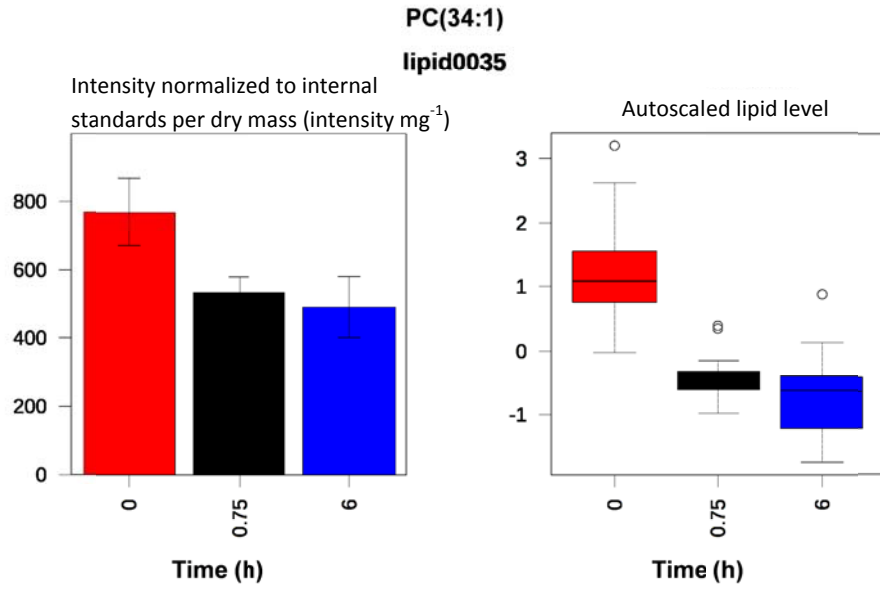
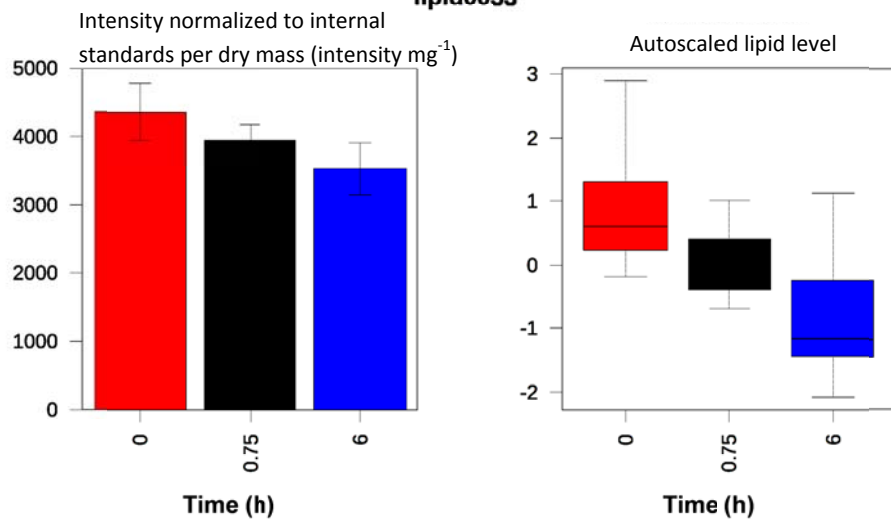


Figure S4.5 – page 87

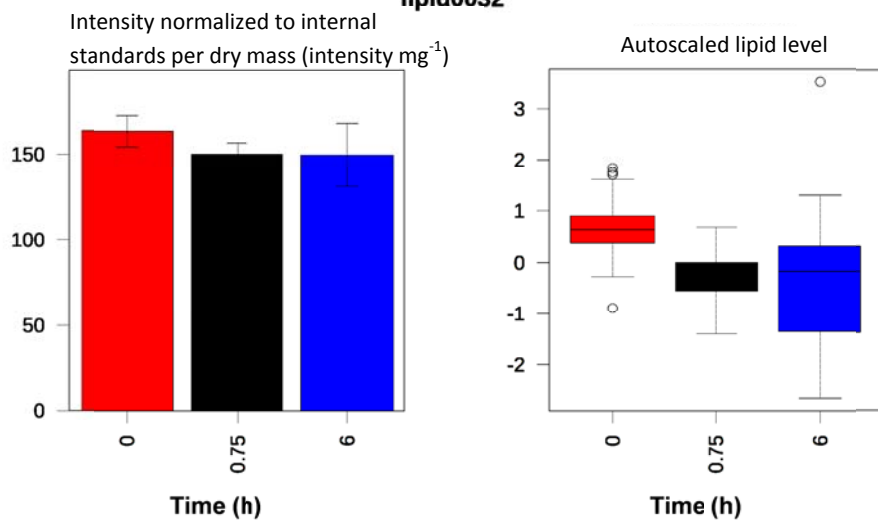
PC(34:3)

lipid0033



PC(34:4)

lipid0032



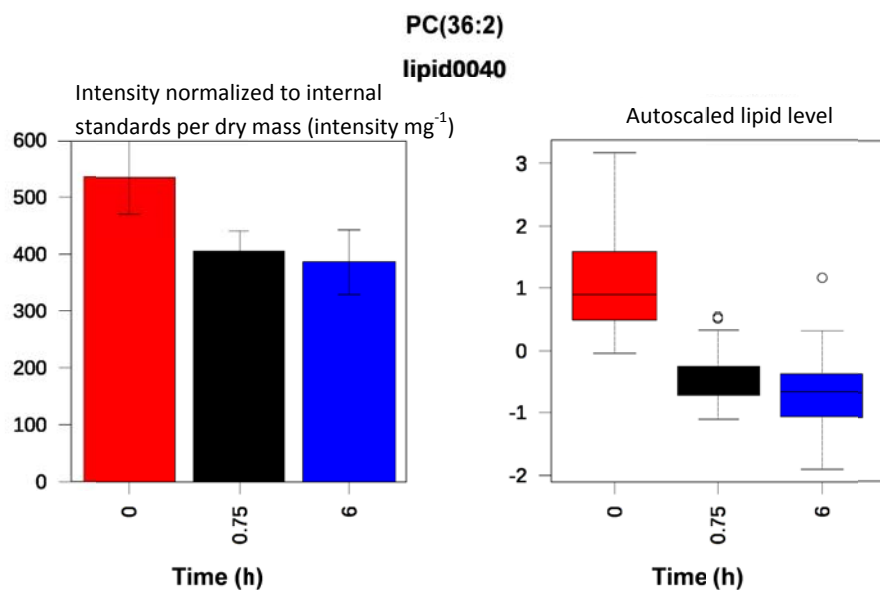
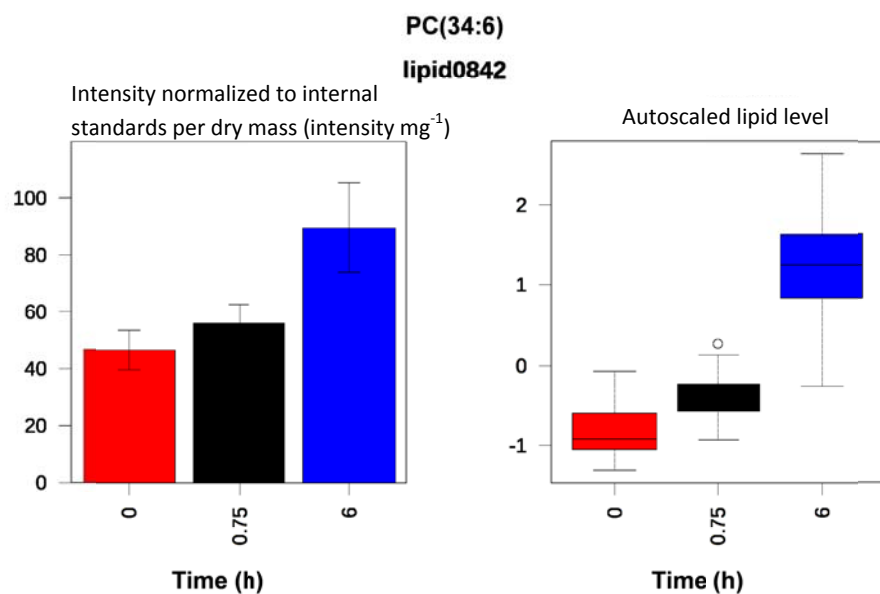
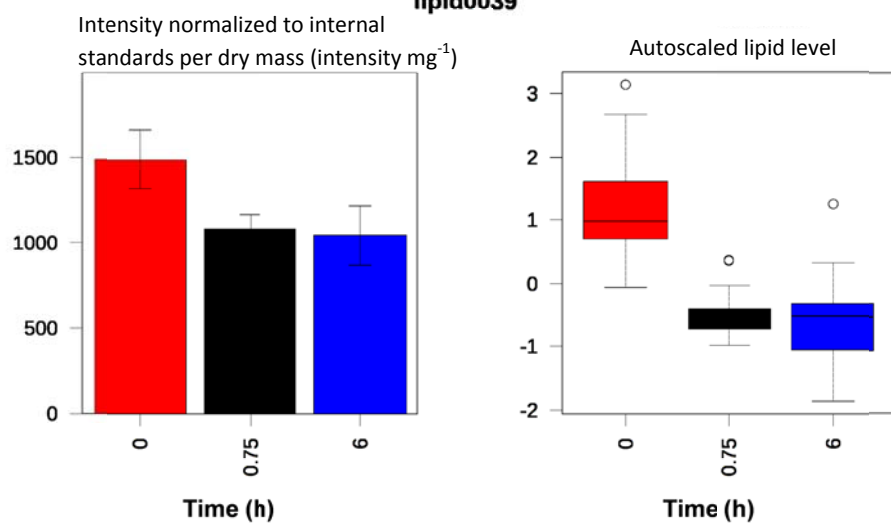


Figure S4.5 – page 89

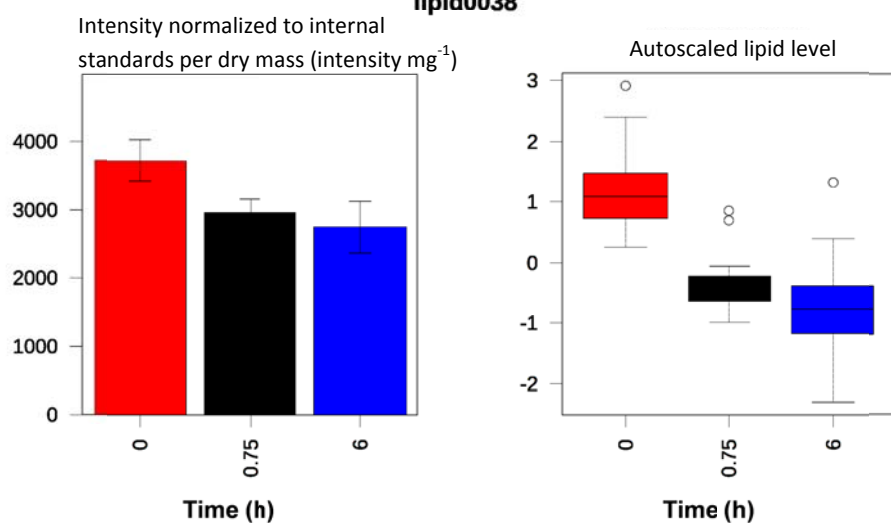
PC(36:3)

lipid0039



PC(36:4)

lipid0038



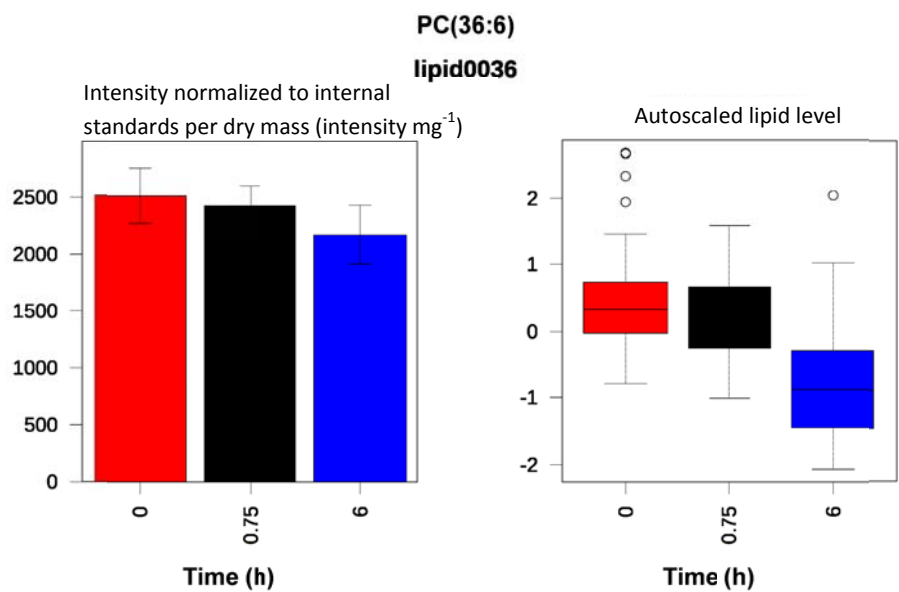
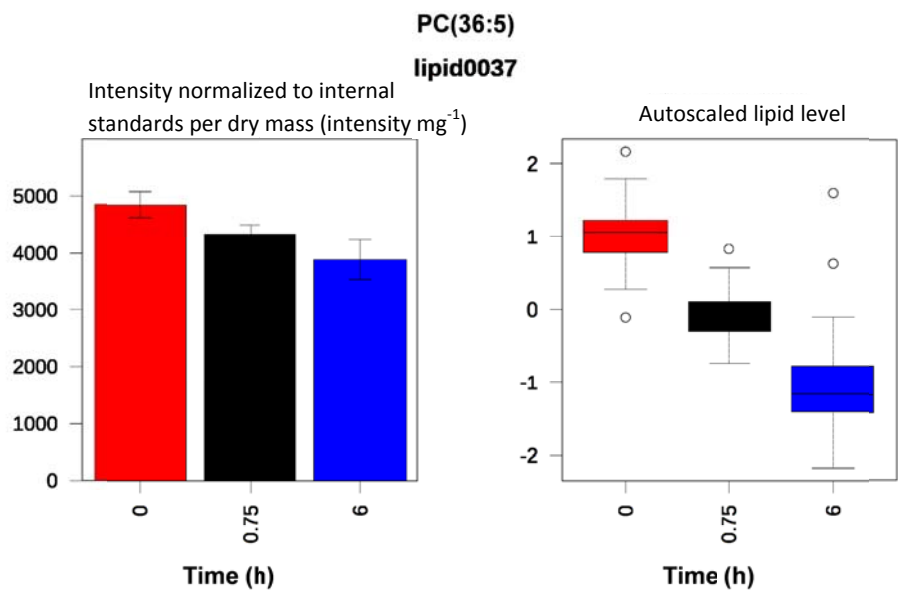


Figure S4.5 – page 91

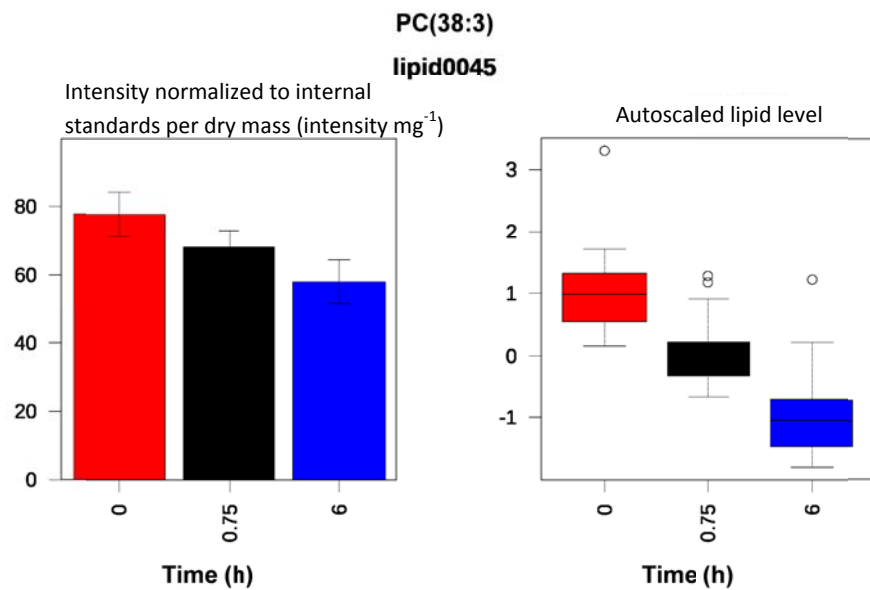
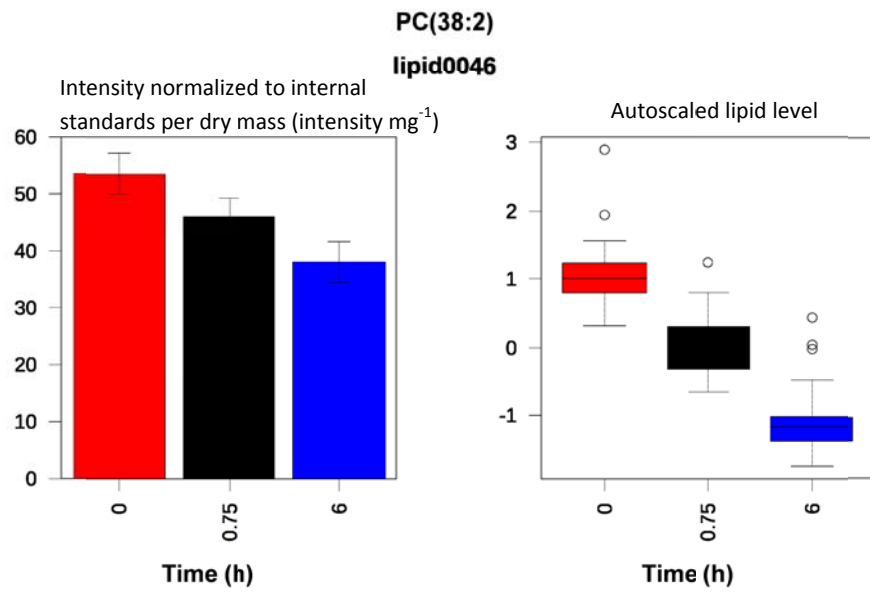


Figure S4.5 – page 92

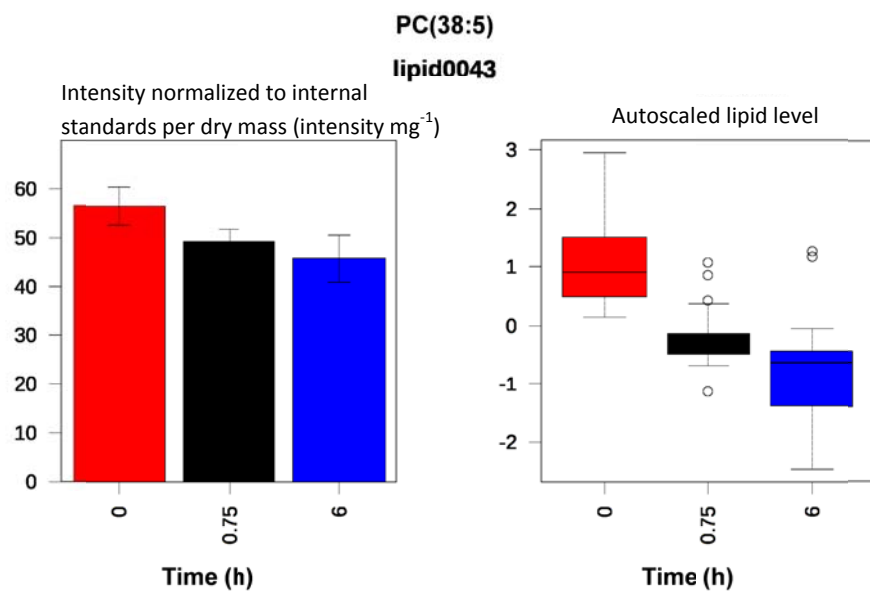
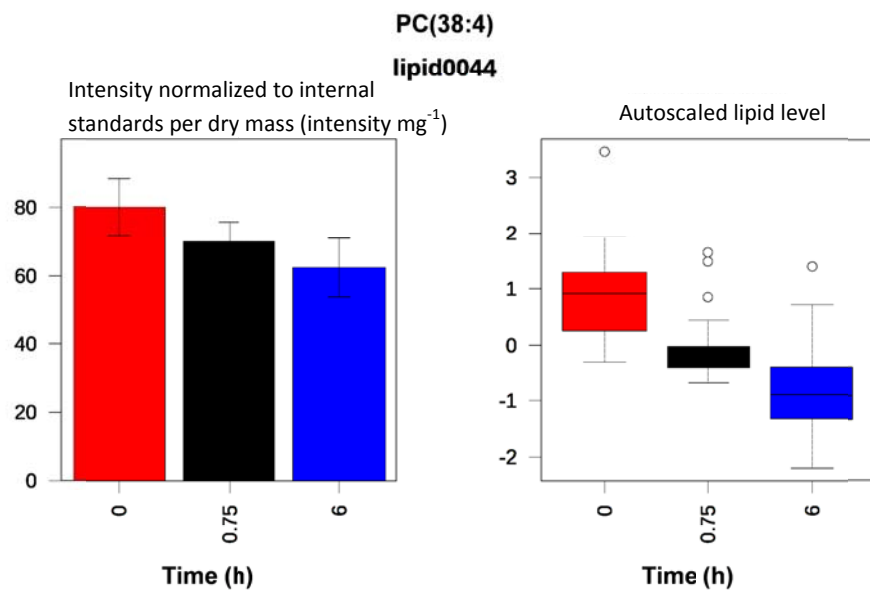


Figure S4.5 – page 93

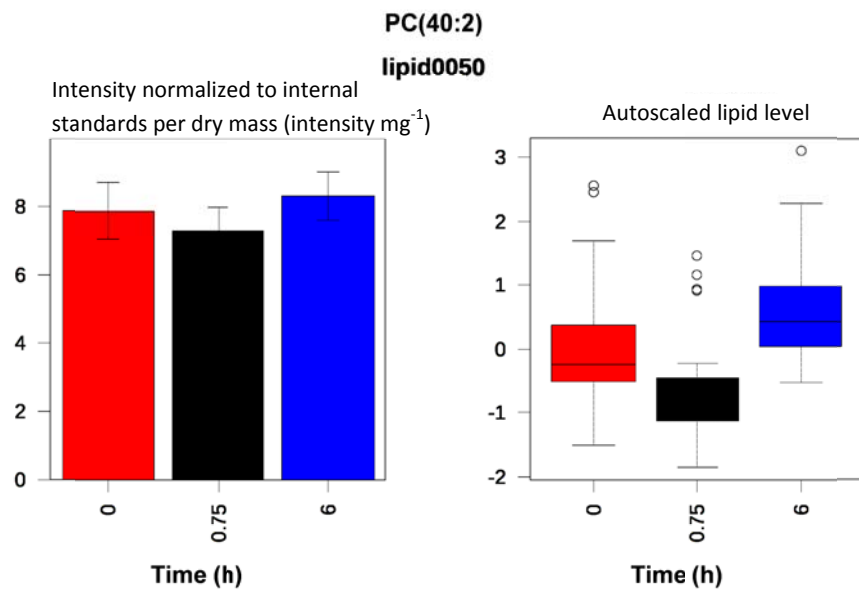
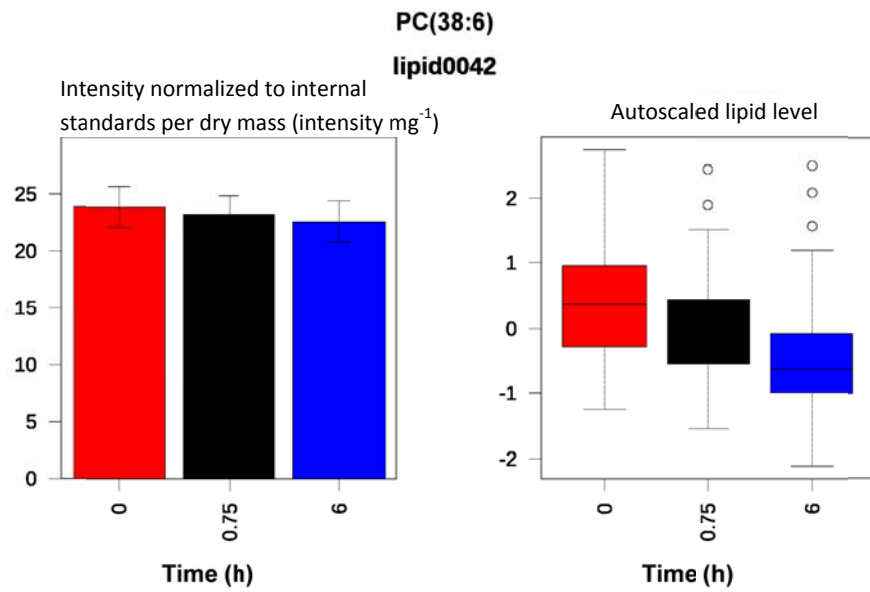


Figure S4.5 – page 94

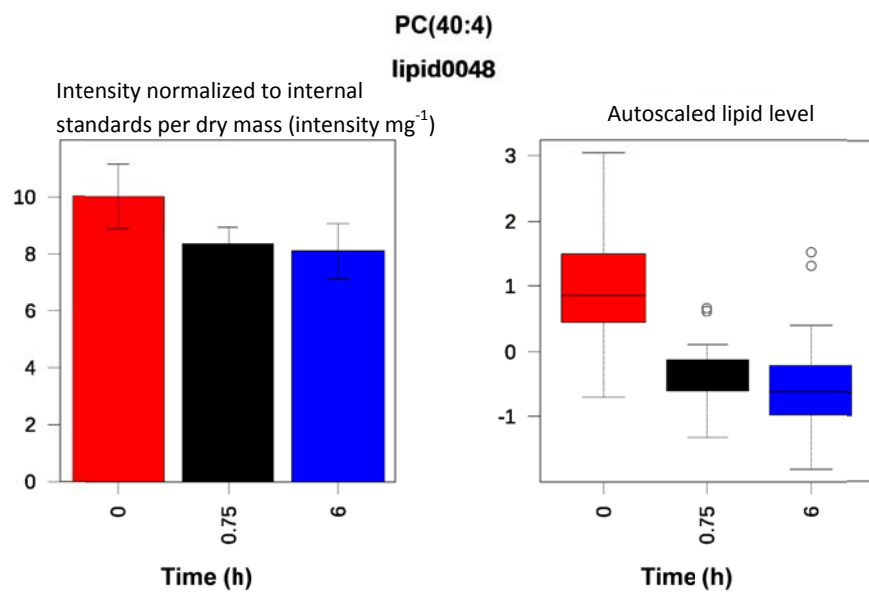
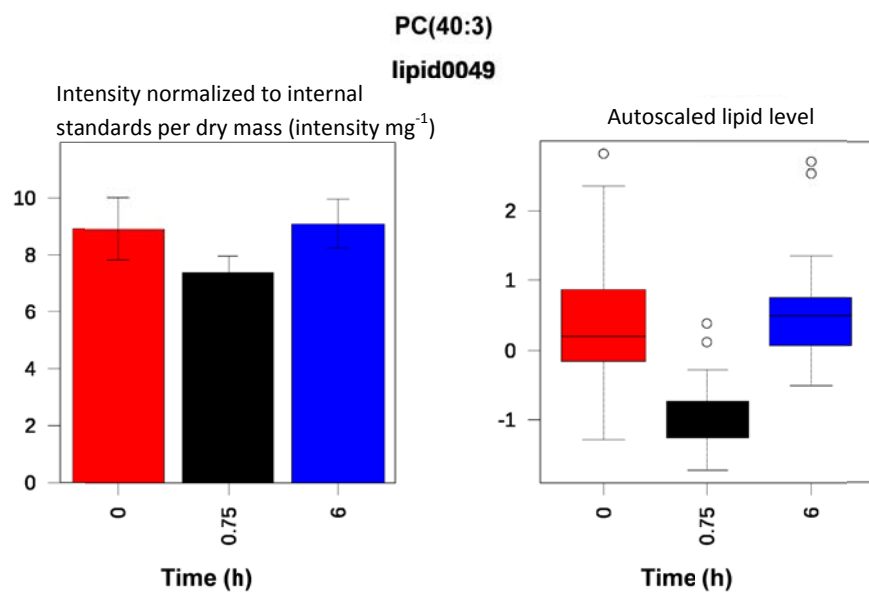
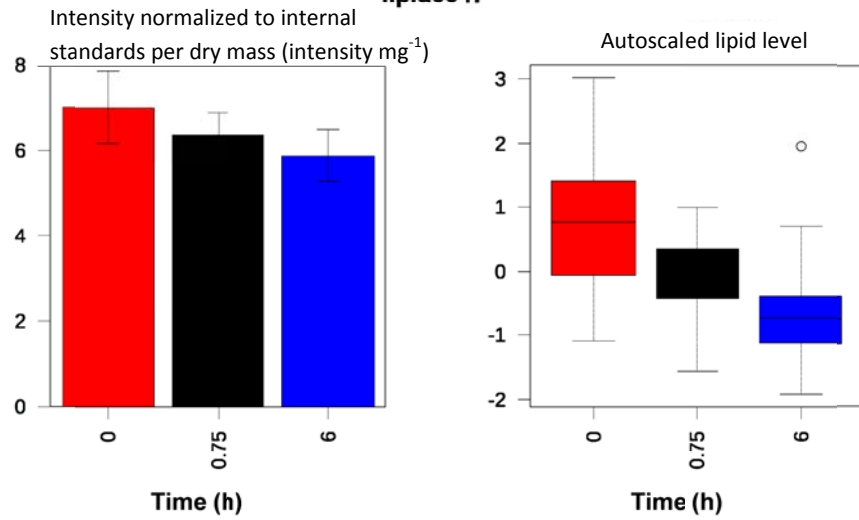


Figure S4.5 – page 95

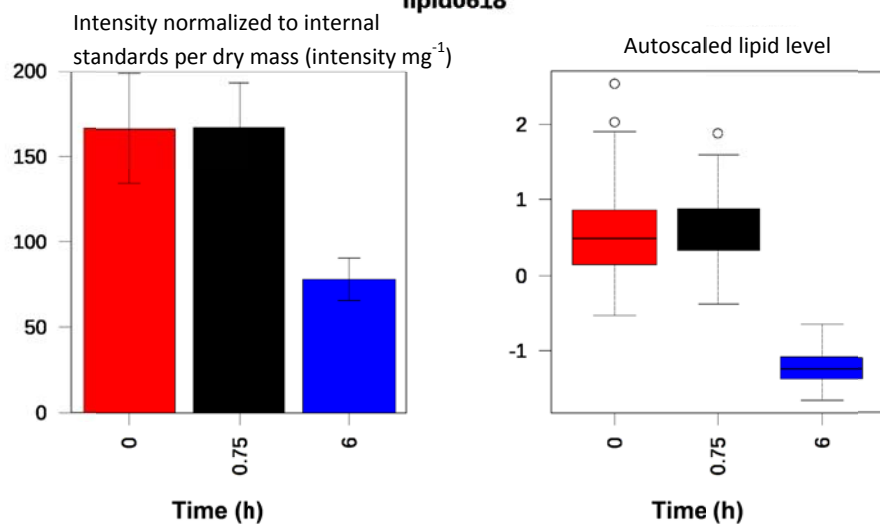
PC(40:5)

lipid0047



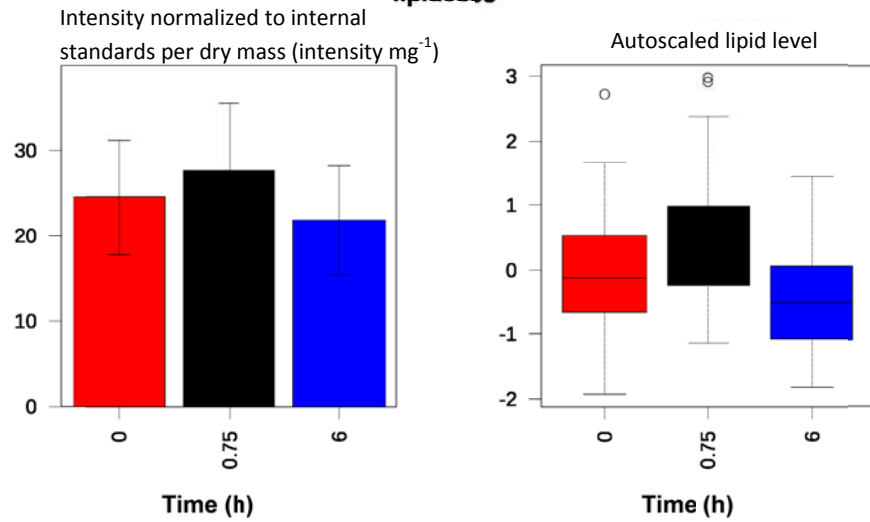
PE(16:0/18:3-O)

lipid0618



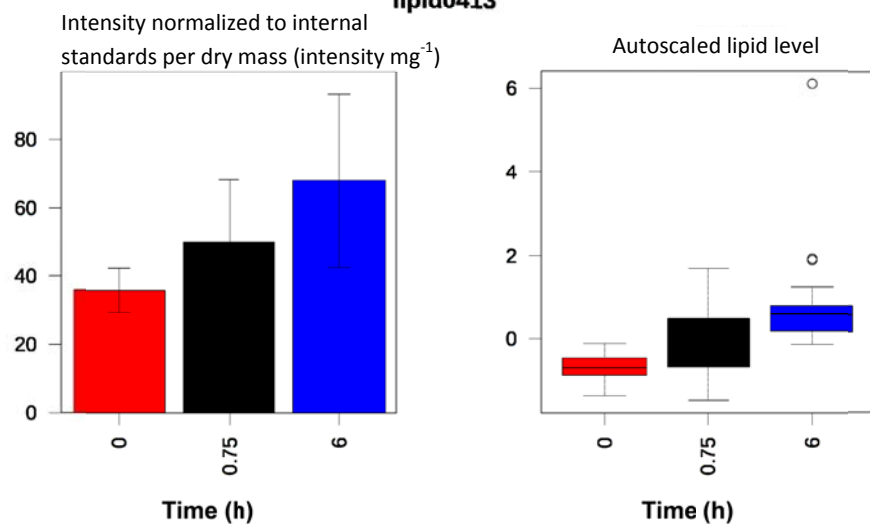
PE(16:0/18:3-20)

lipid0355



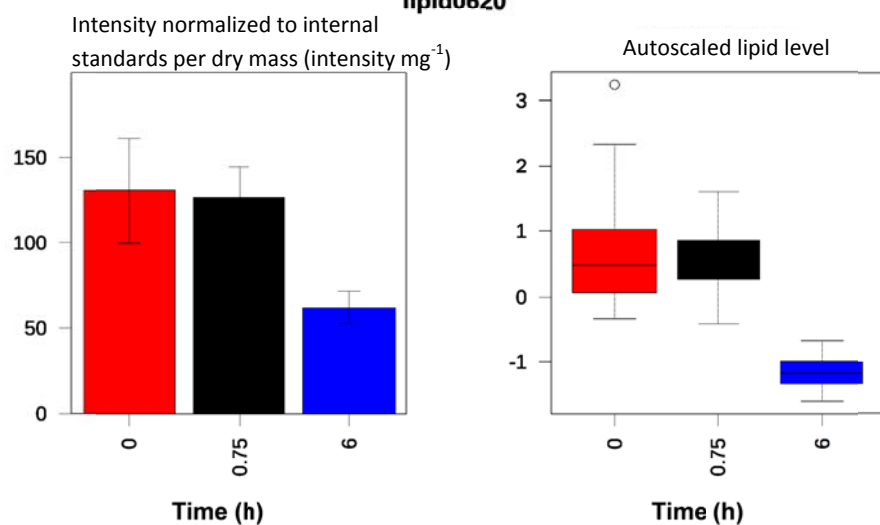
PE(16:0/18:3-30)

lipid0413



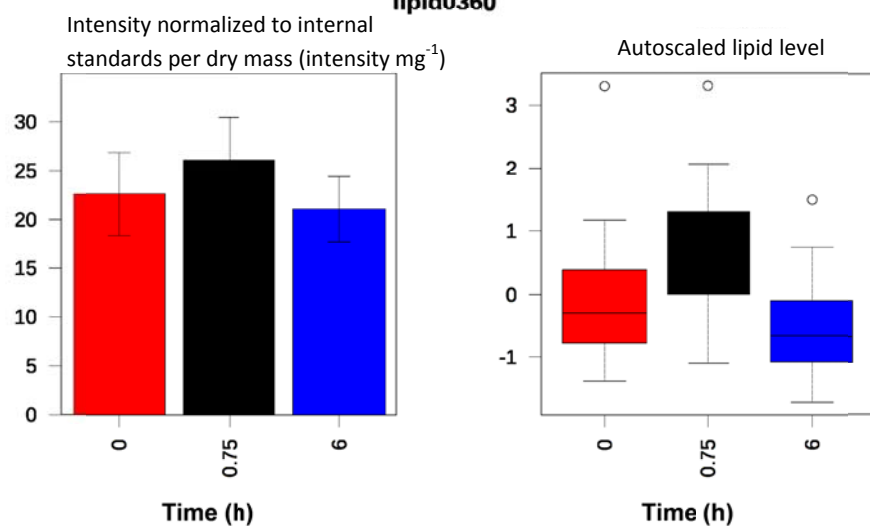
PE(18:2/18:3-O)

lipid0620



PE(18:2/18:3-2O)

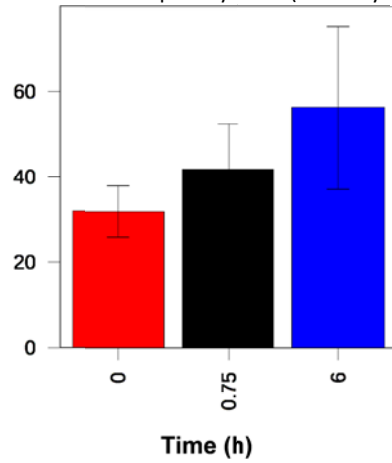
lipid0360



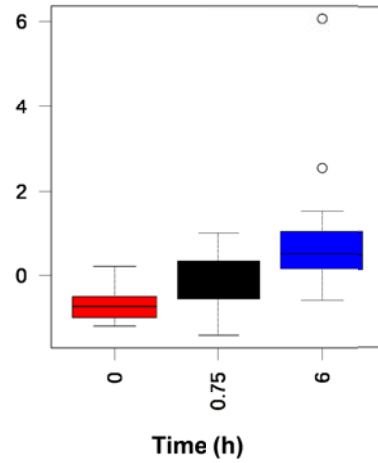
PE(18:2/18:3-3O)

lipid0415

Intensity normalized to internal standards per dry mass (intensity mg^{-1})



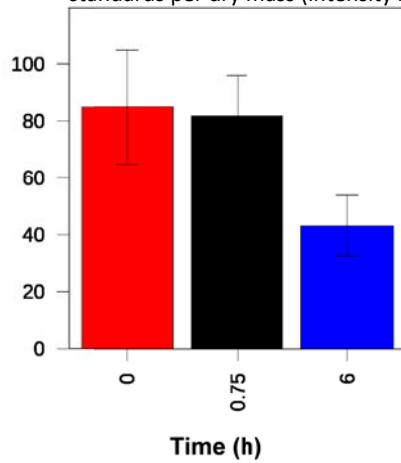
Autoscaled lipid level



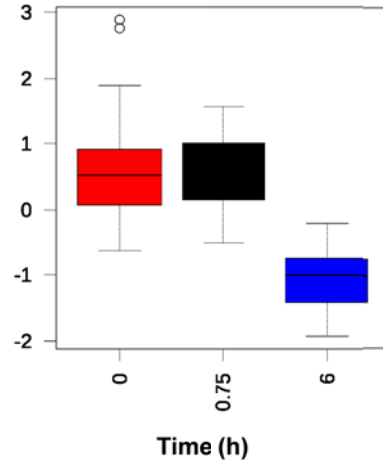
PE(18:3/18:3-O)

lipid0619

Intensity normalized to internal standards per dry mass (intensity mg^{-1})

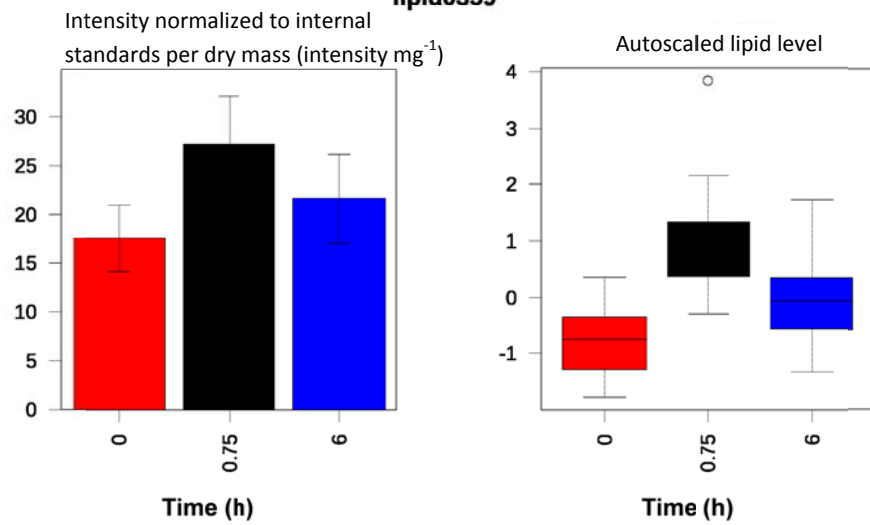


Autoscaled lipid level



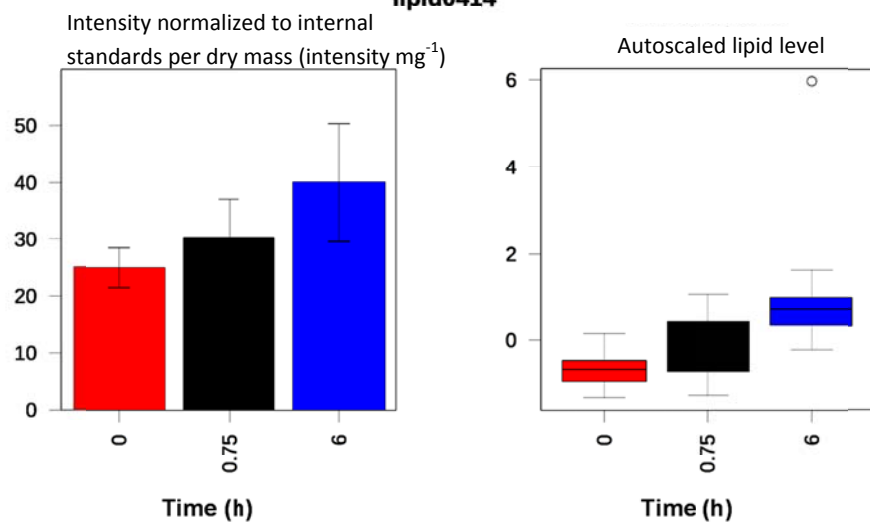
PE(18:3/18:3-20)

lipid0359



PE(18:3/18:3-30)

lipid0414



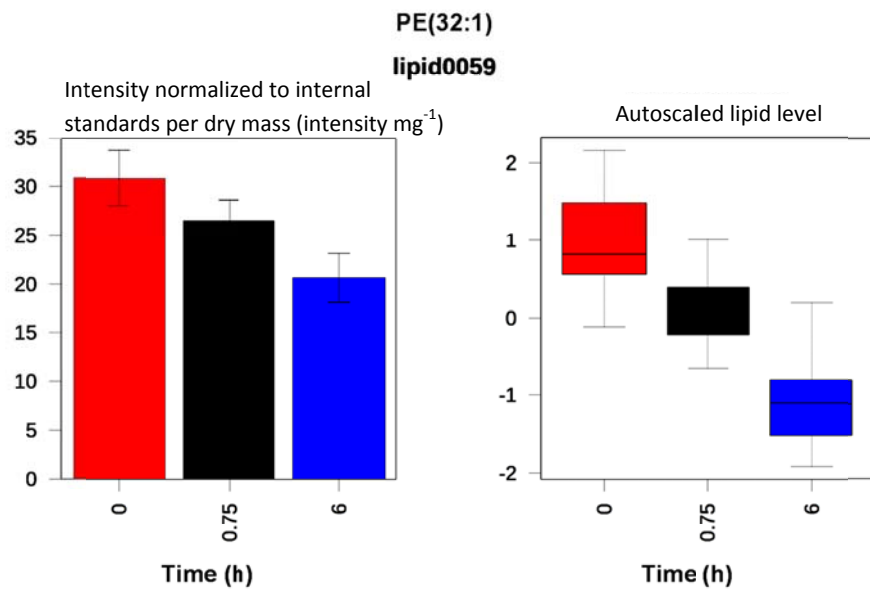
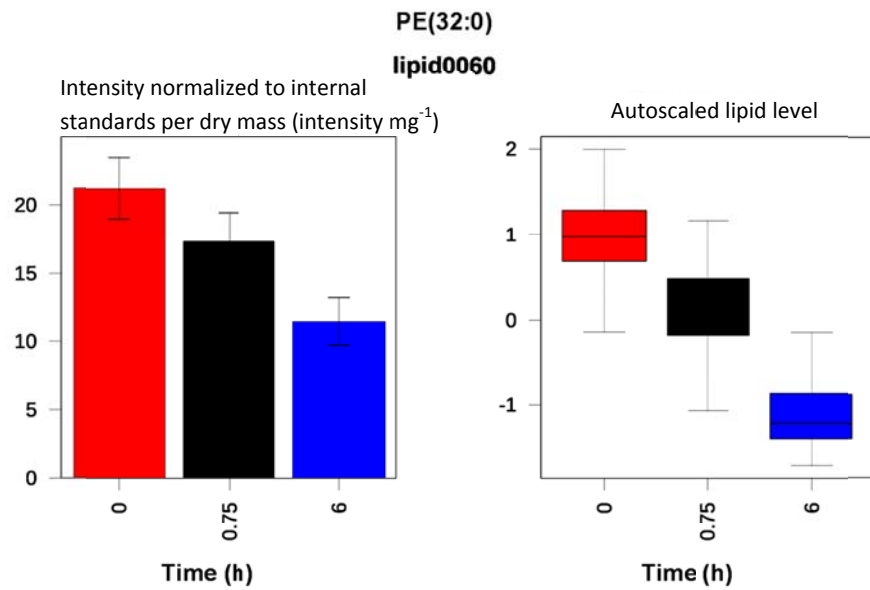
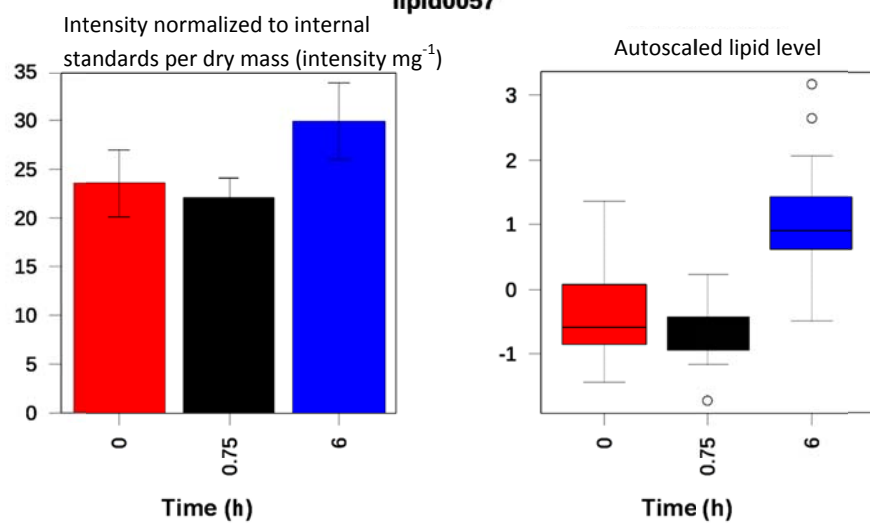


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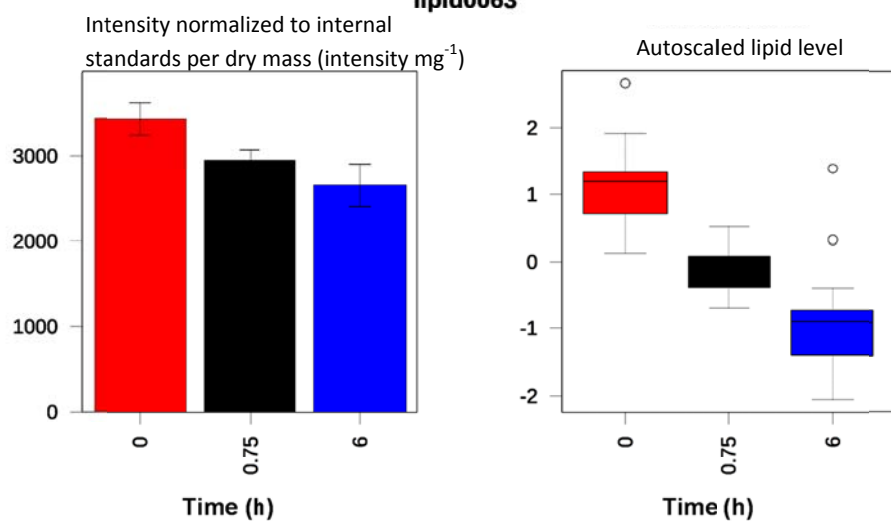
PE(32:3)

lipid0057



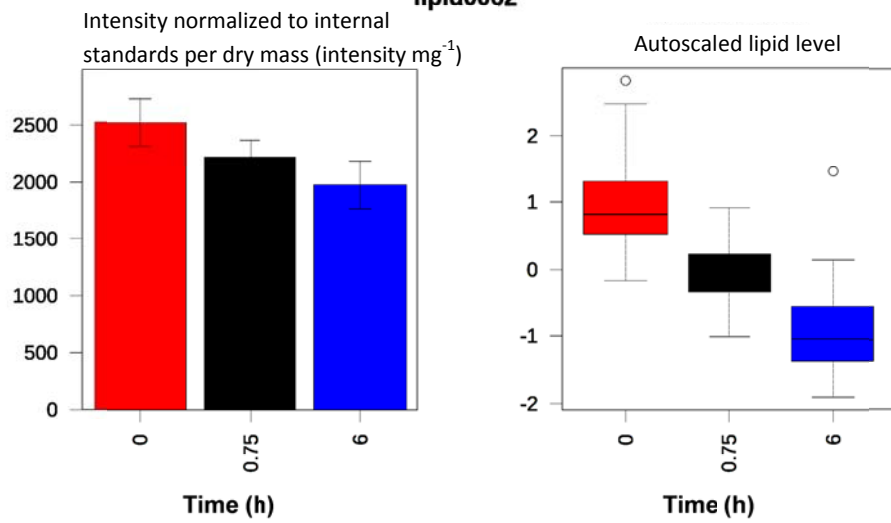
PE(34:2)

lipid0063



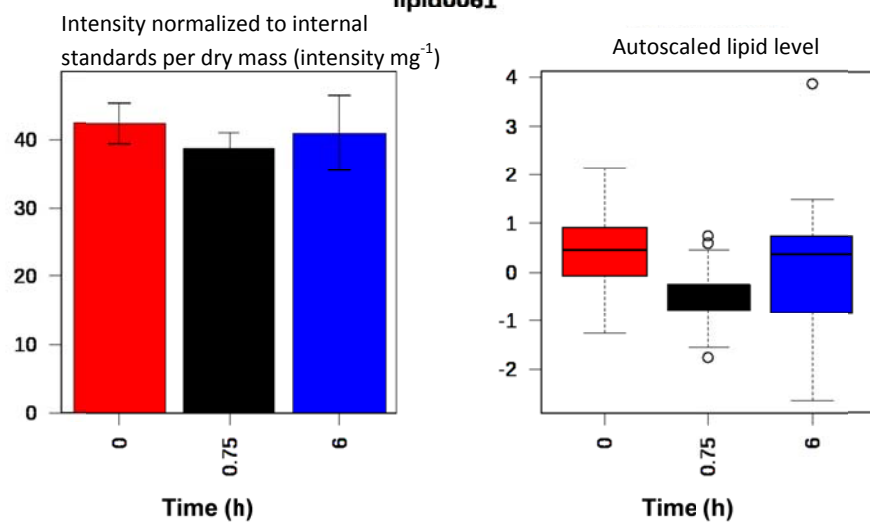
PE(34:3)

lipid0062



PE(34:4)

lipid0061



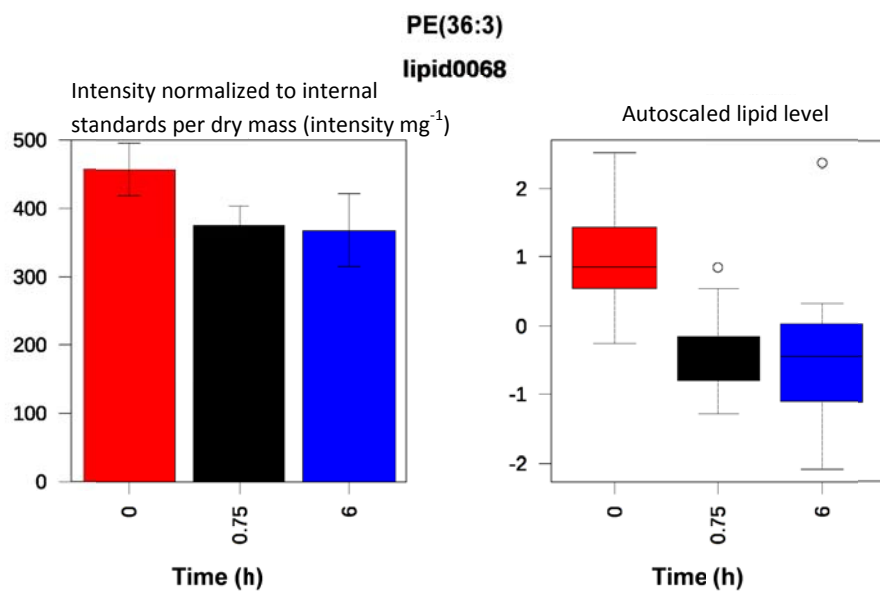
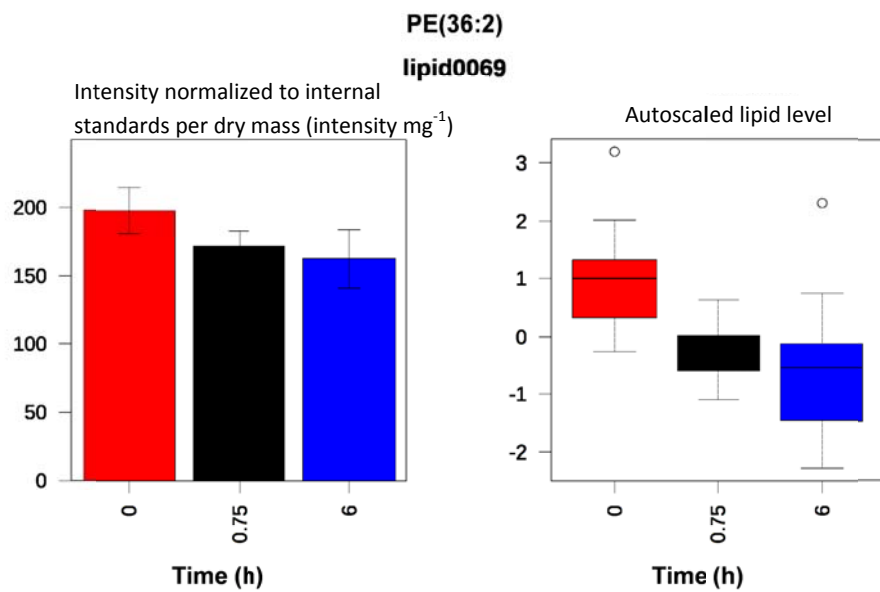


Figure S4.5 – page 104

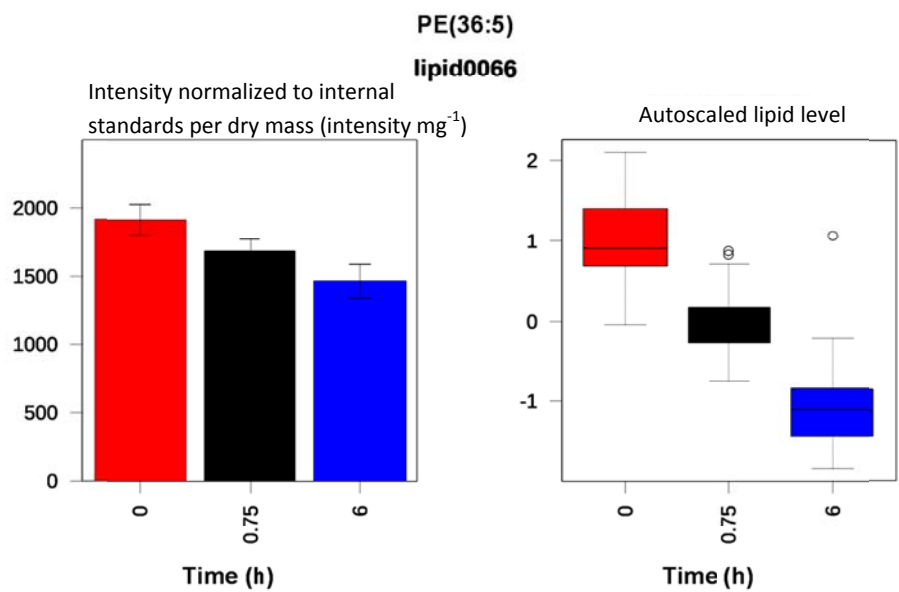
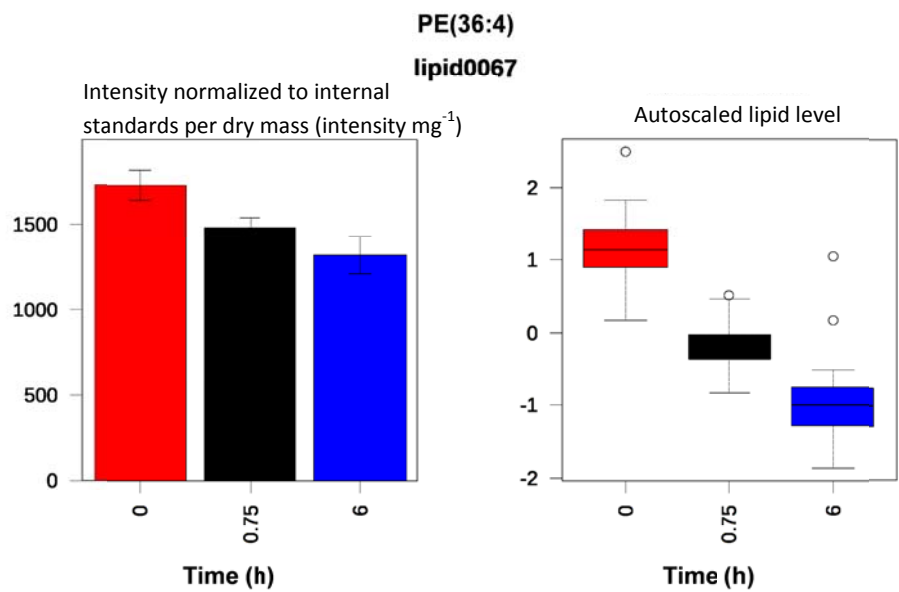


Figure S4.5 – page 105

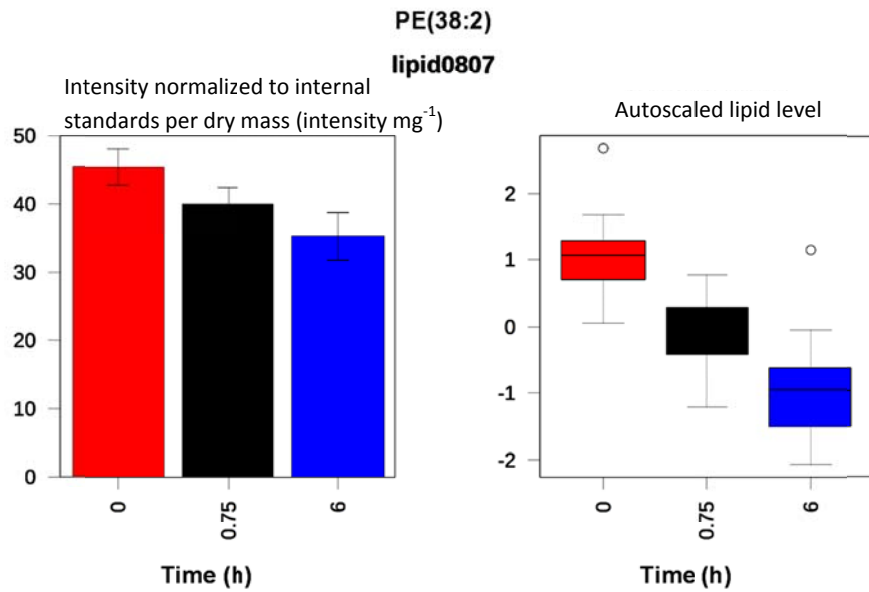
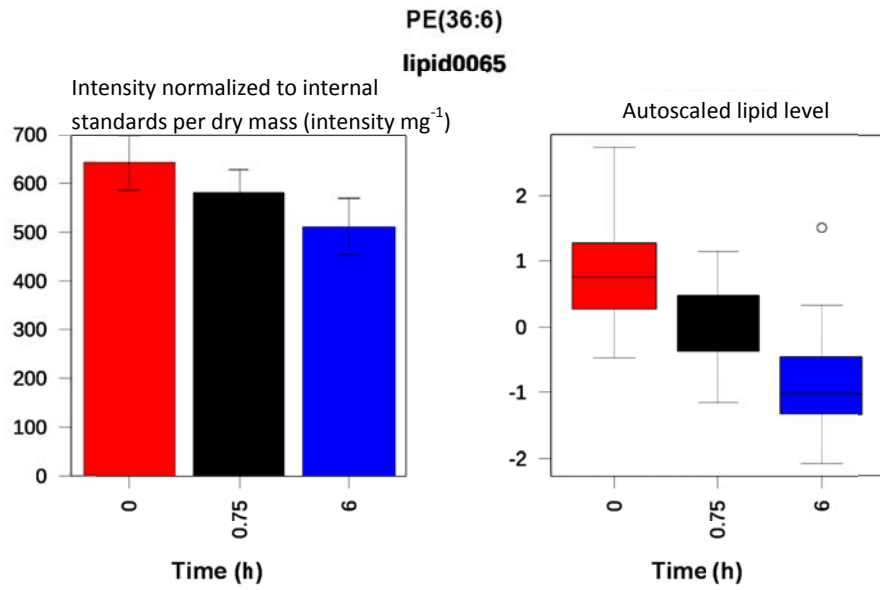


Figure S4.5 – page 106

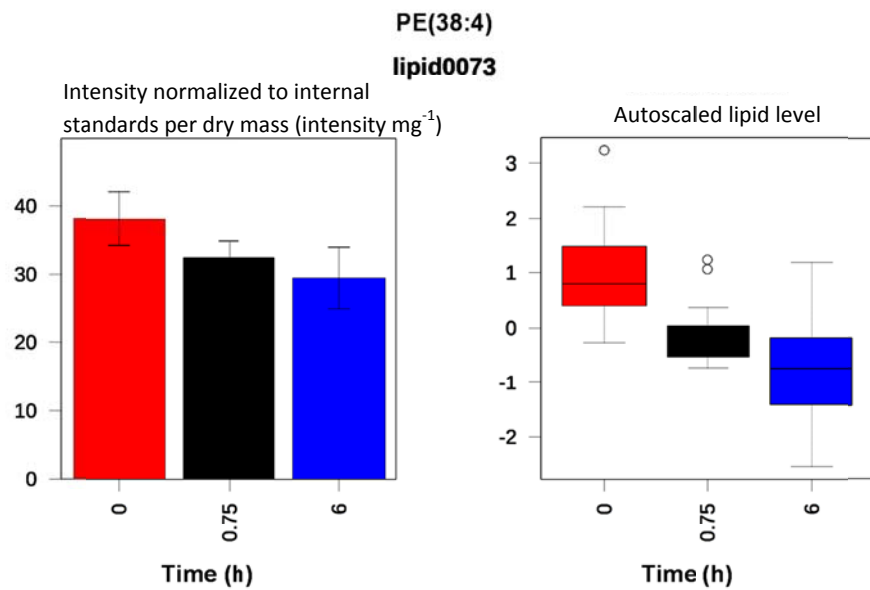
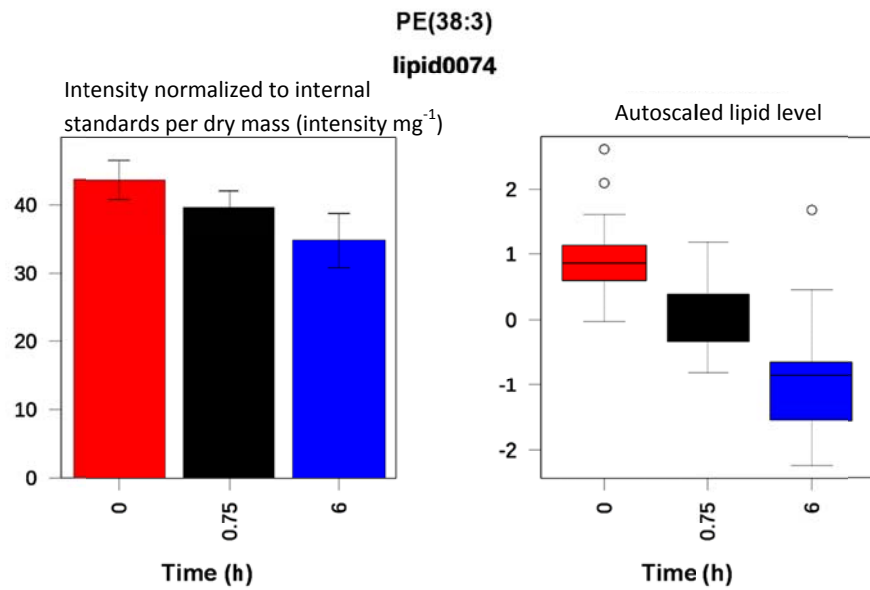


Figure S4.5 – page 107

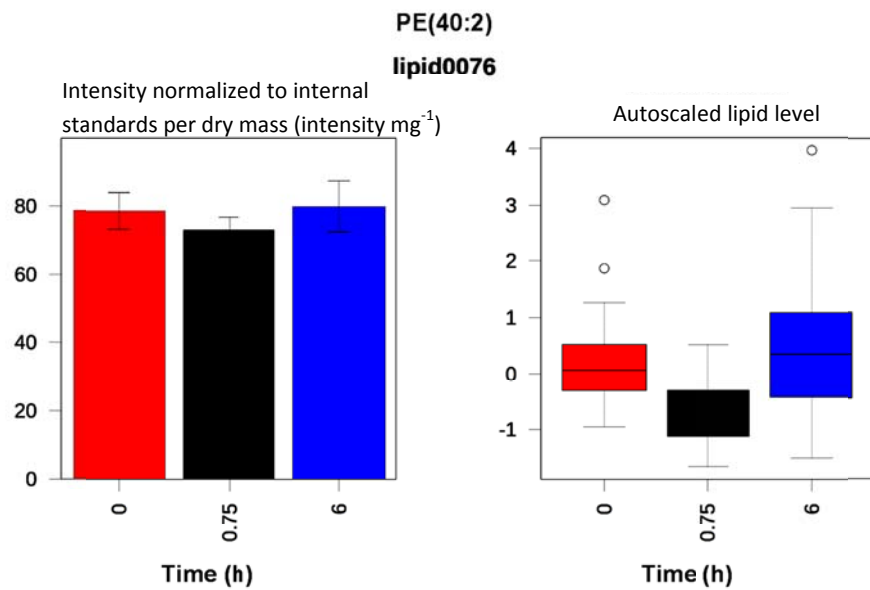
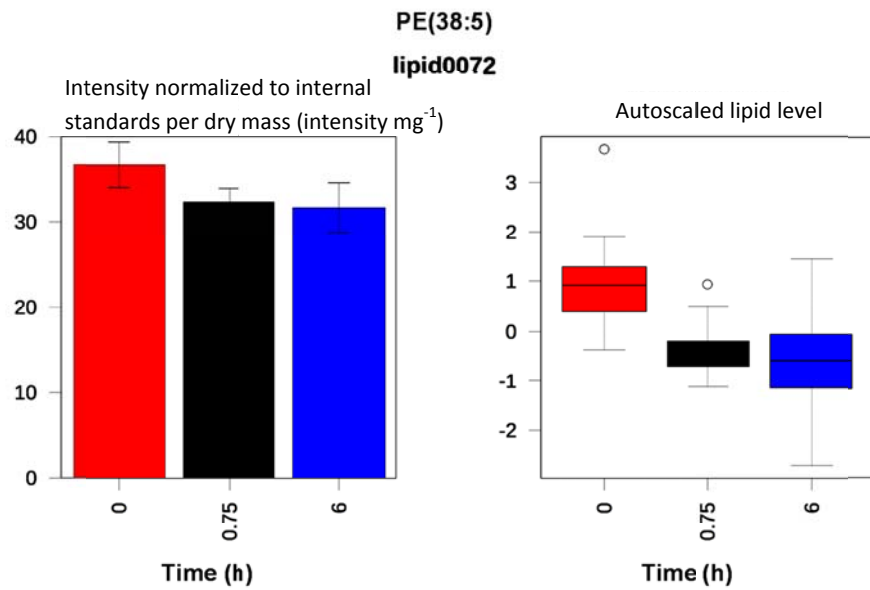
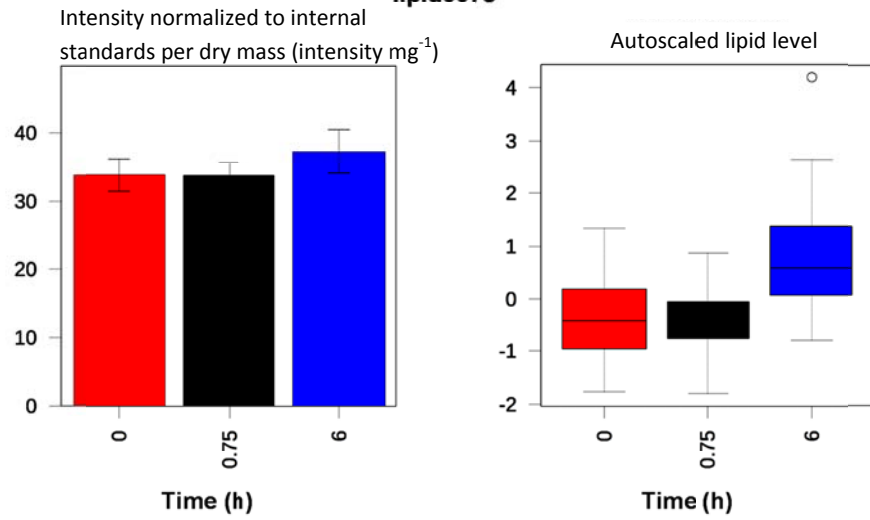


Figure S4.5 – page 108

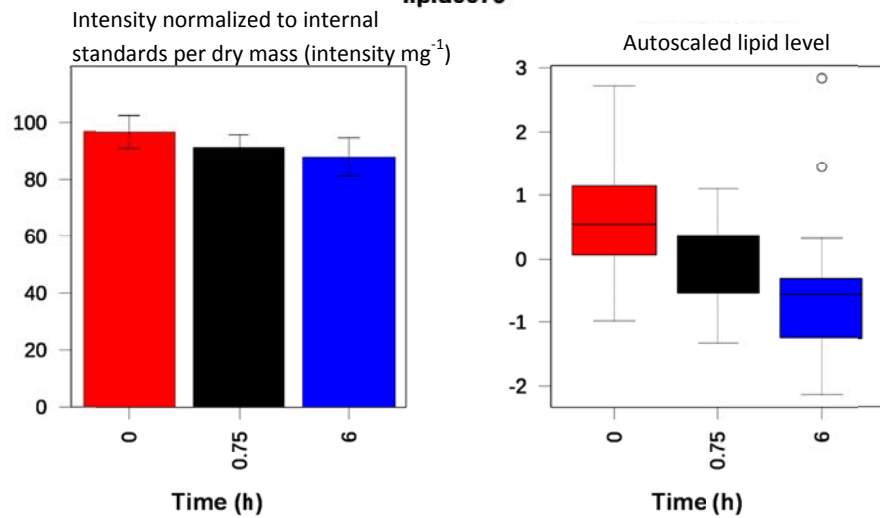
PE(40:3)

lipid0075



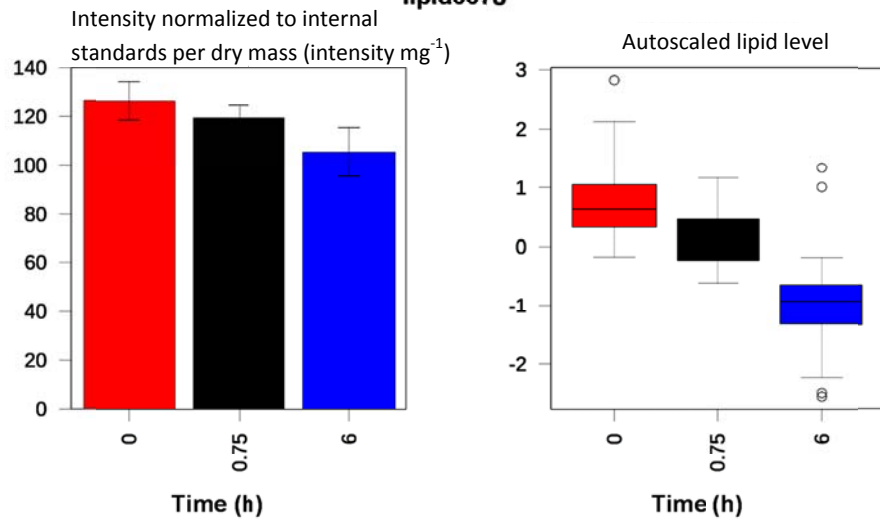
PE(42:2)

lipid0079



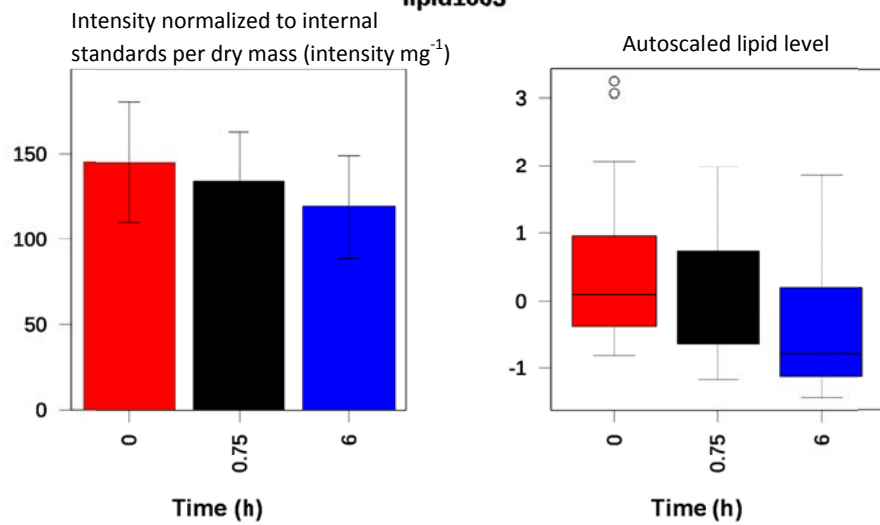
PE(42:3) (measured in positive mode)

lipid0078



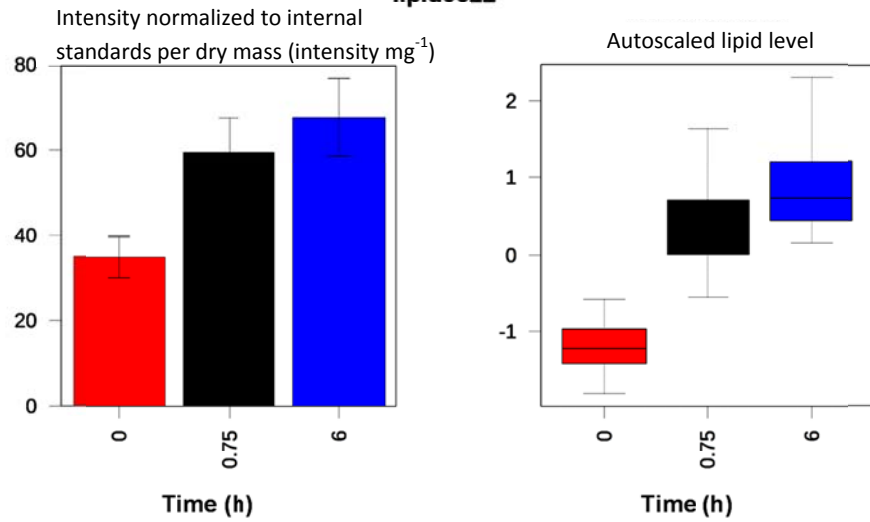
PE(42:3) (measured in negative mode)

lipid1003



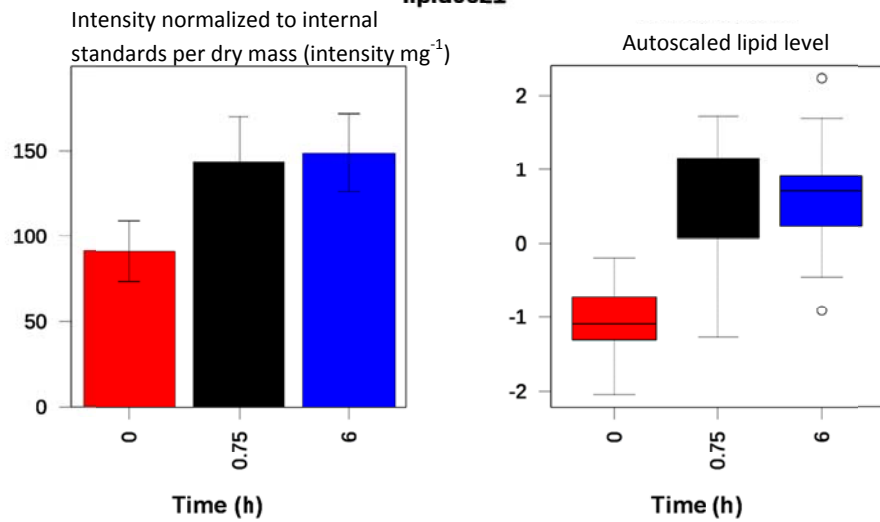
PG(18:3-O/16:0)

lipid0622



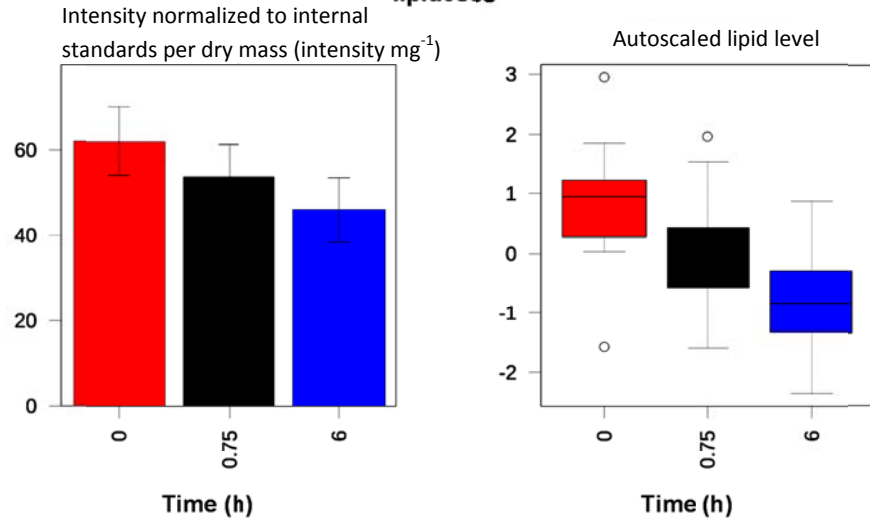
PG(18:3-O/16:1)

lipid0621



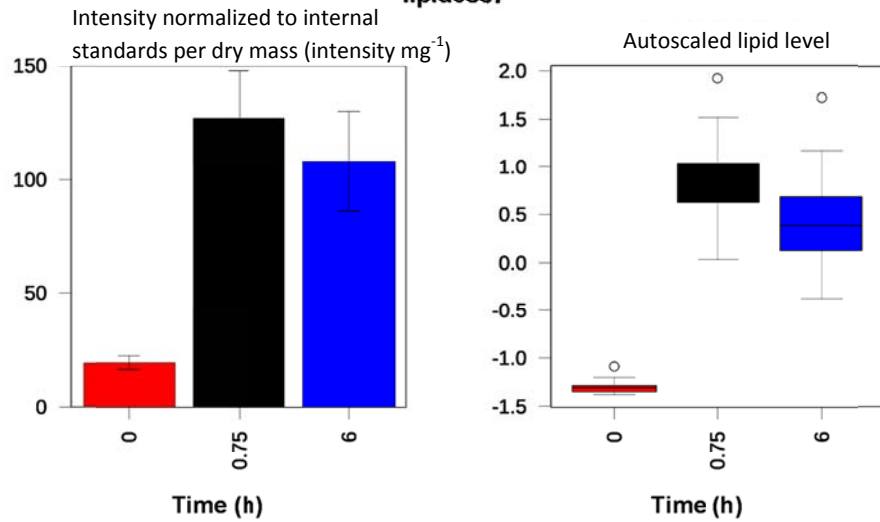
PG(18:2/16:0-O)

lipid0353



PG(18:4-O/16:0)

lipid0357



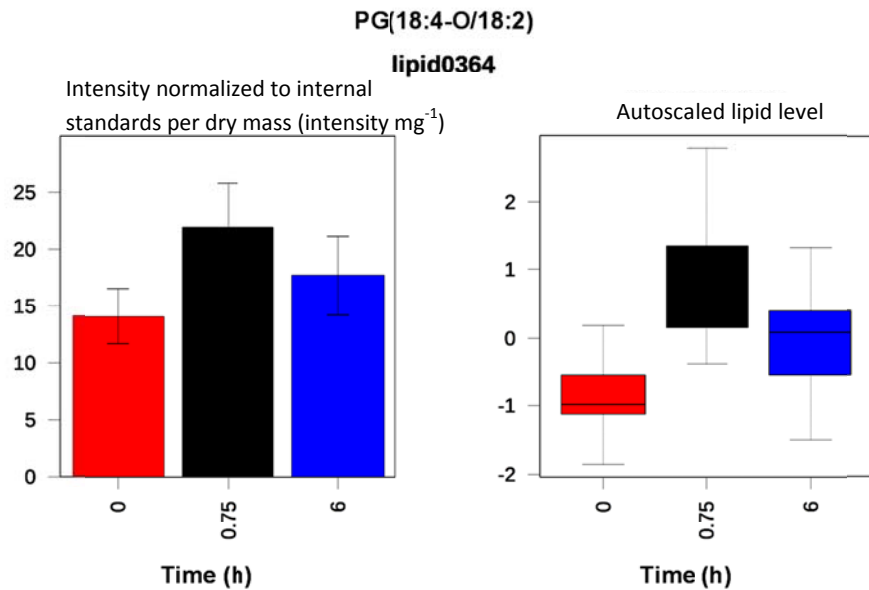
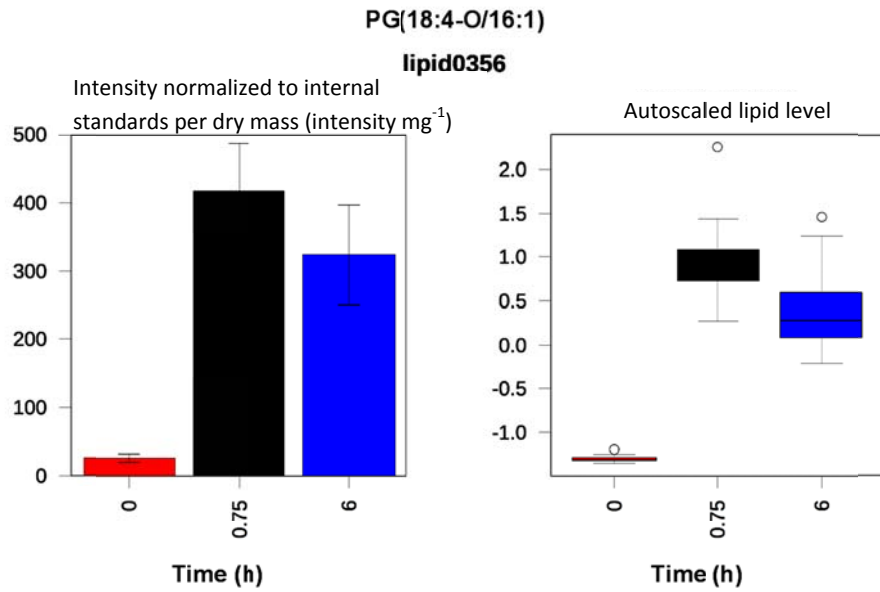
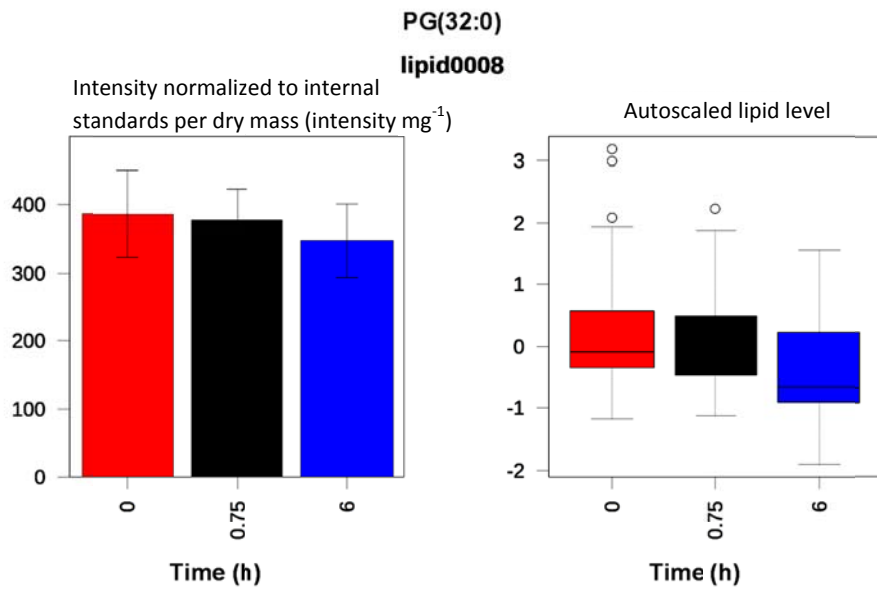
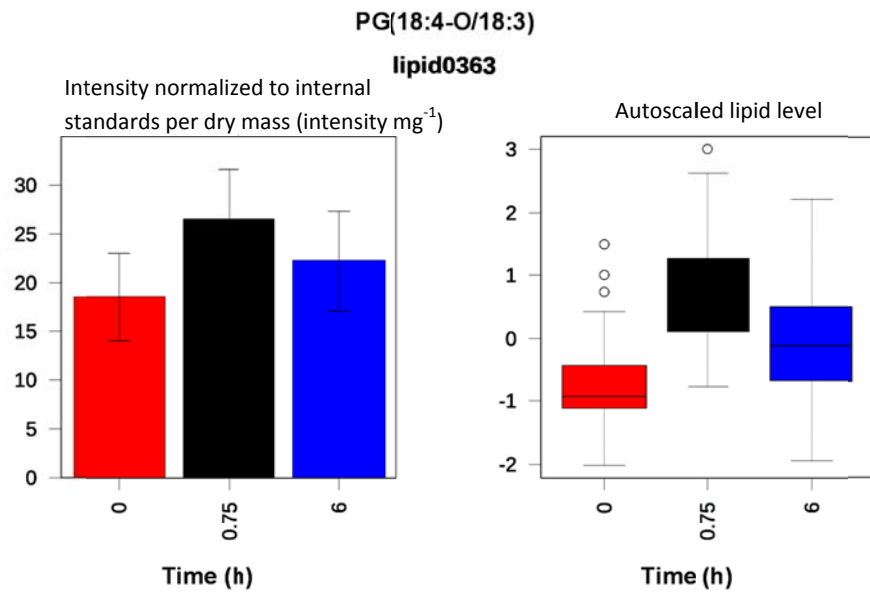


Figure S4.5 – page 113



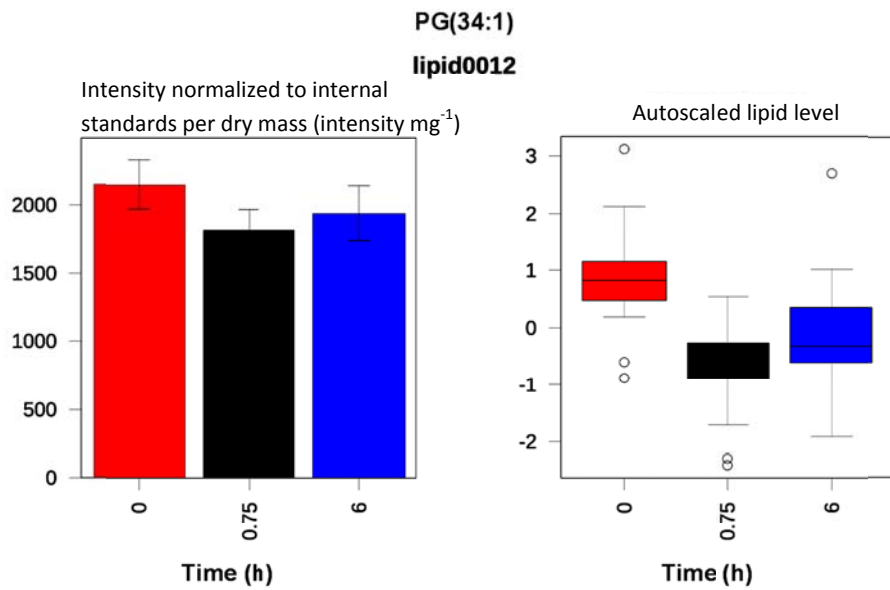
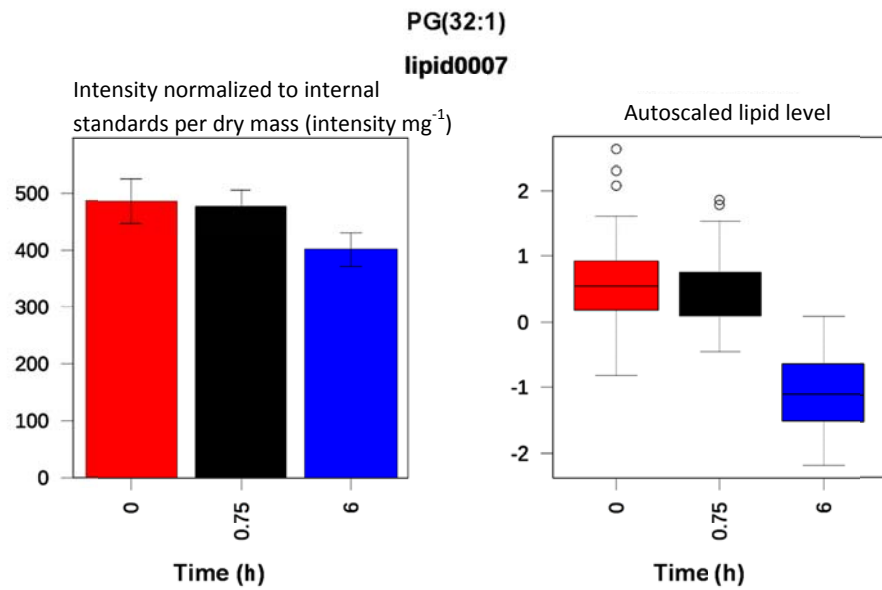


Figure S4.5 – page 115

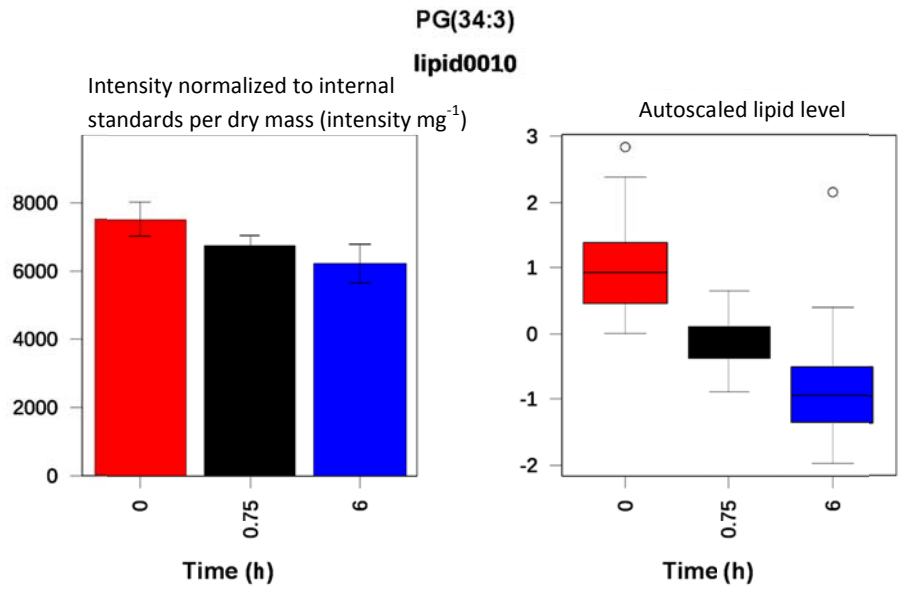
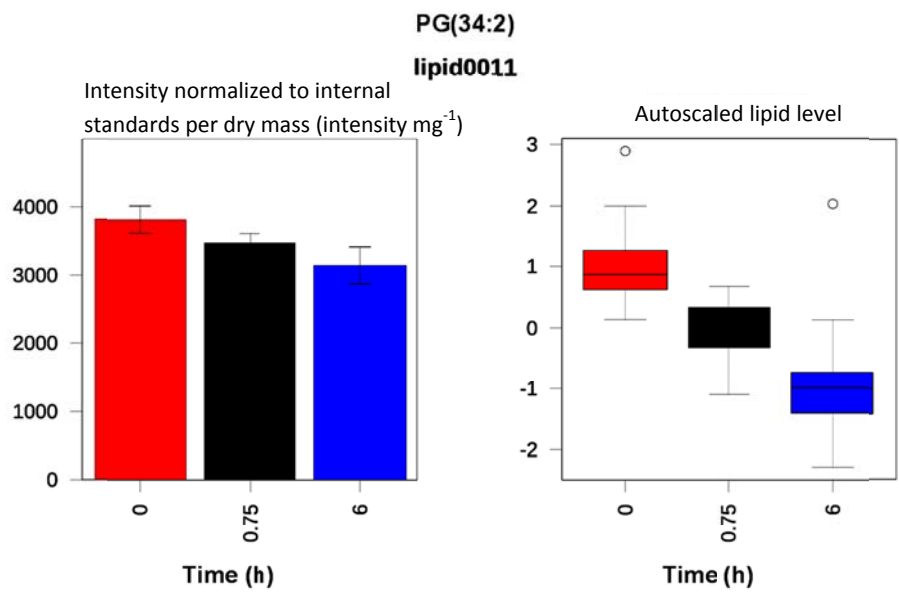


Figure S4.5 – page 116

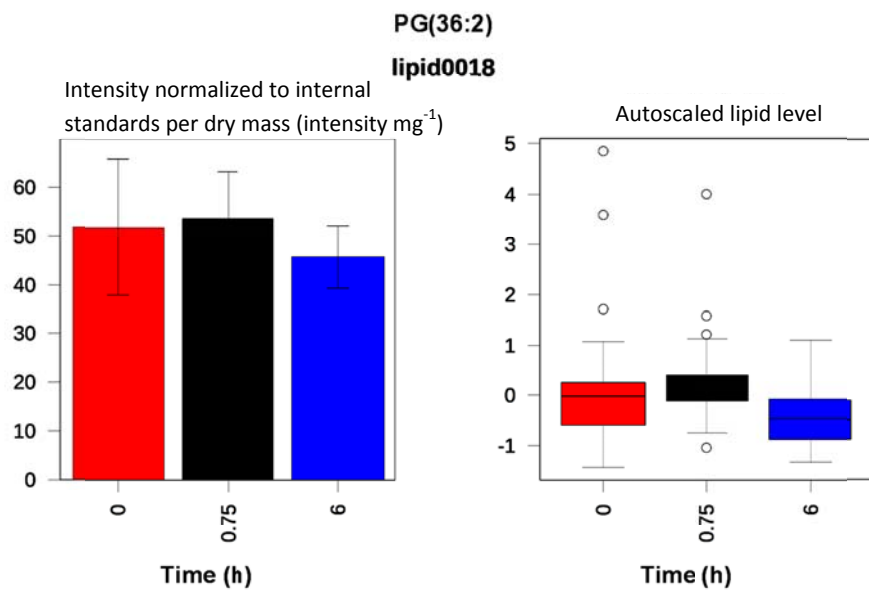
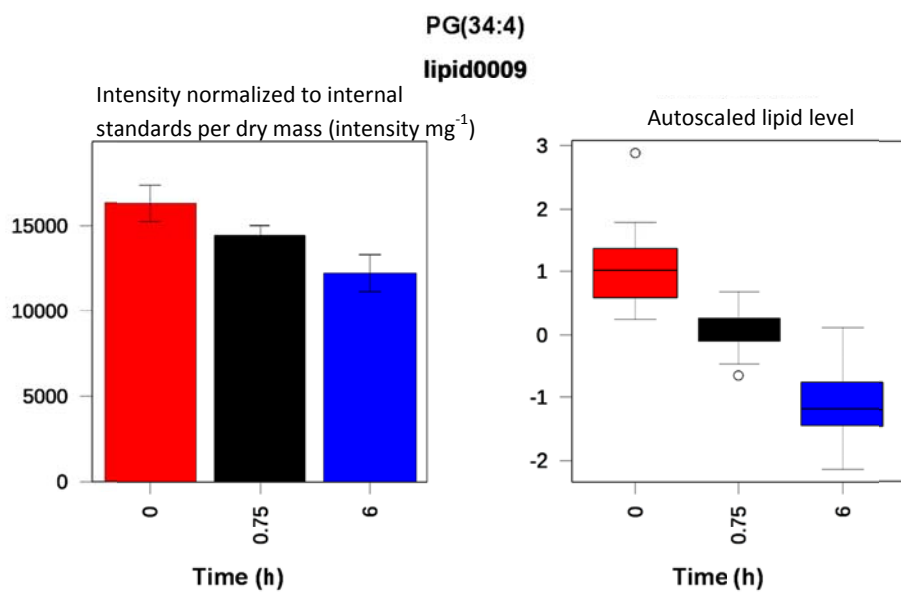
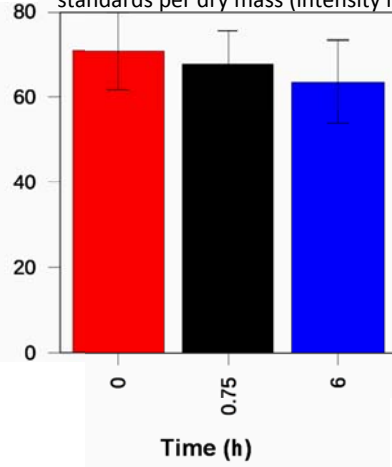


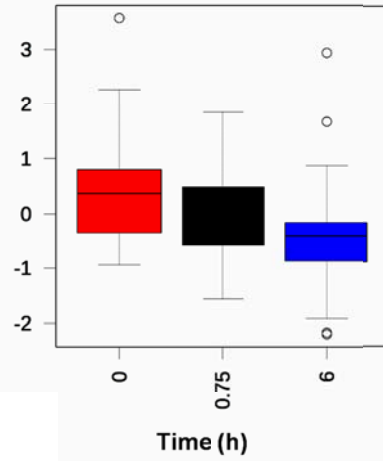
Figure S4.5 – page 117

**PG(36:3)
lipid0017**

Intensity normalized to internal standards per dry mass (intensity mg^{-1})

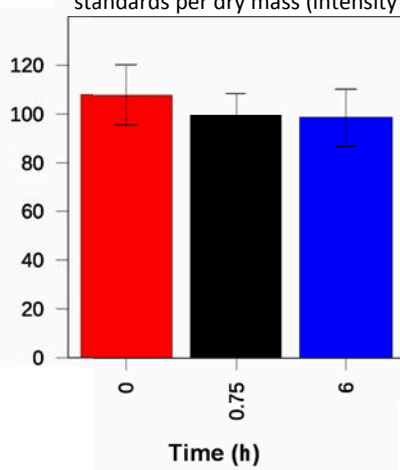


Autoscaled lipid level

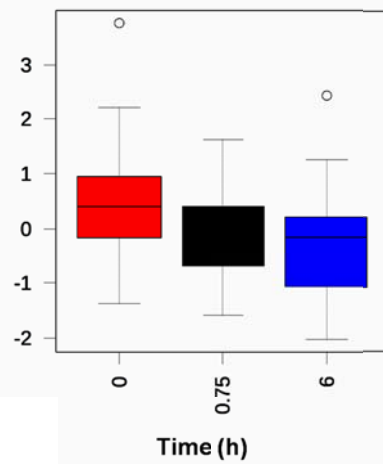


**PG(36:4)
lipid0016**

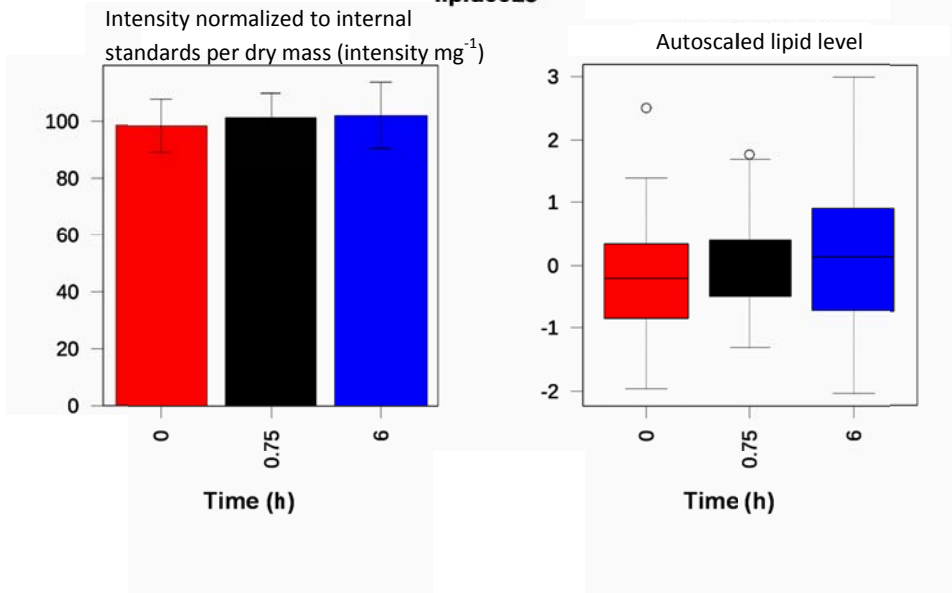
Intensity normalized to internal standards per dry mass (intensity mg^{-1})



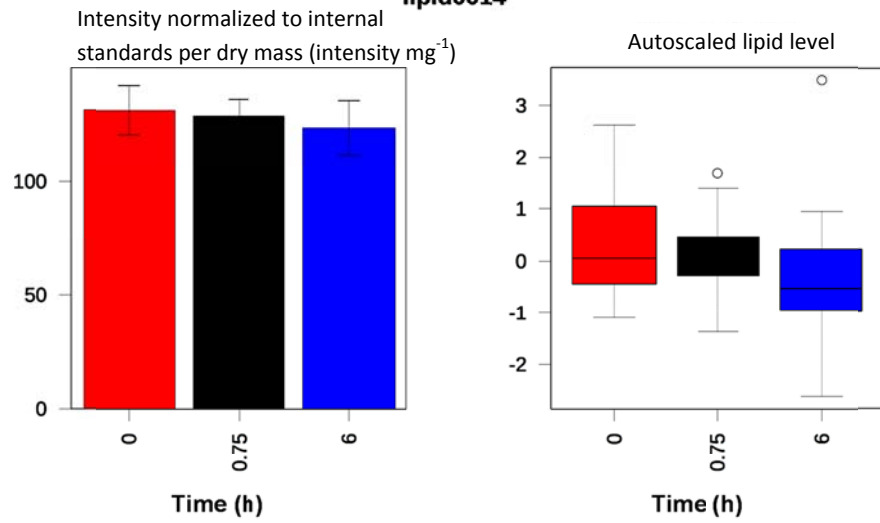
Autoscaled lipid level



**PG(36:5)
lipid0015**



**PG(36:6)
lipid0014**



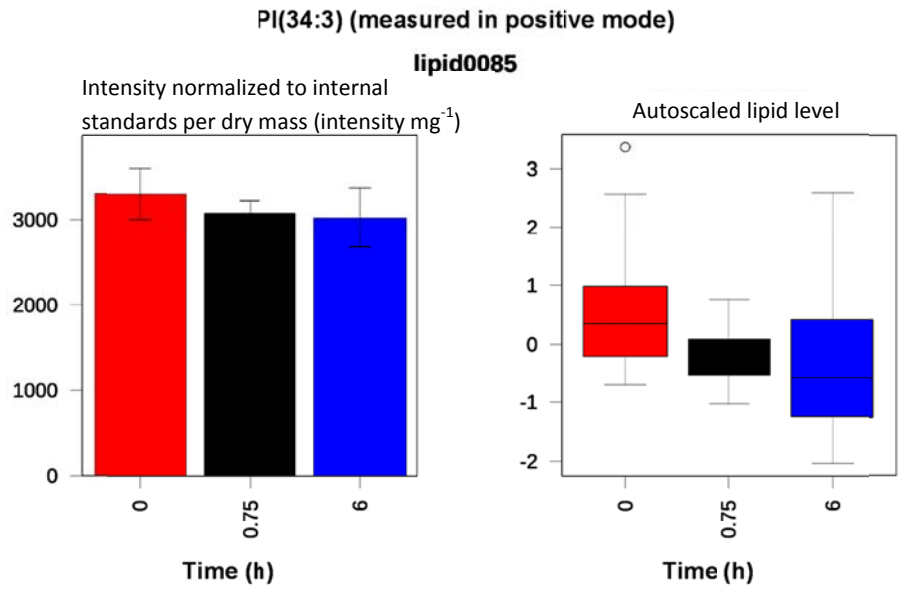
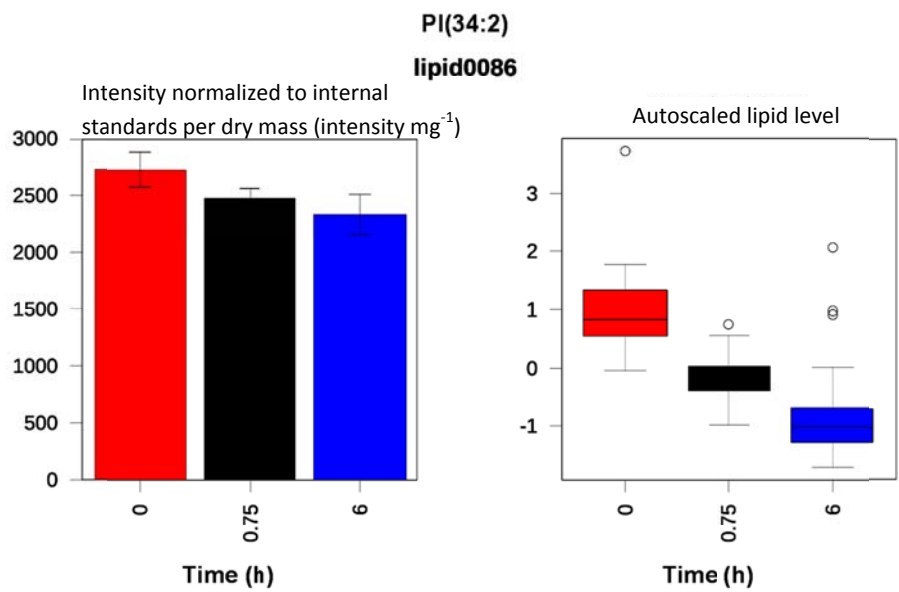
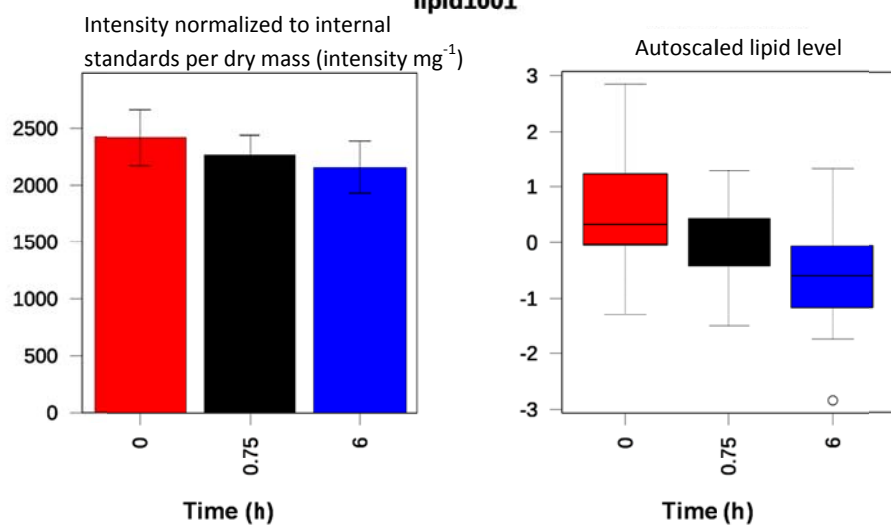


Figure S4.5 – page 120

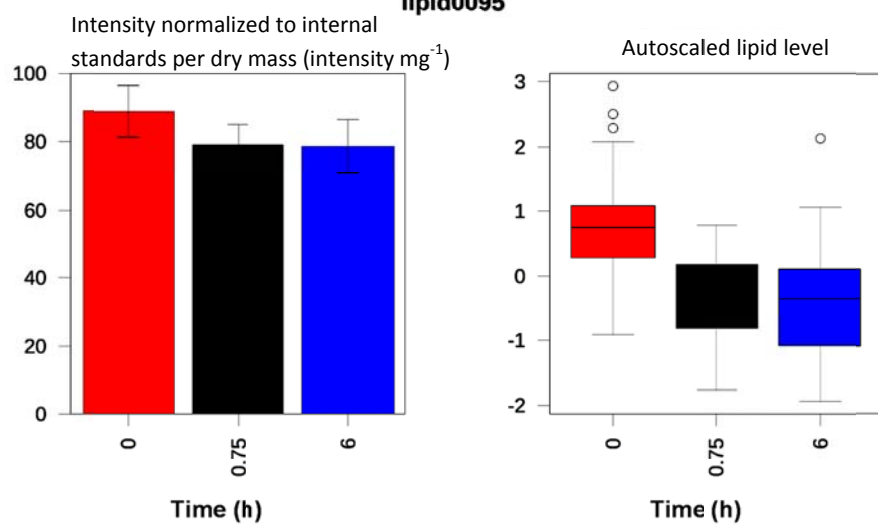
PI(34:3) (measured in negative mode)

lipid1001



PS(34:3)

lipid0095



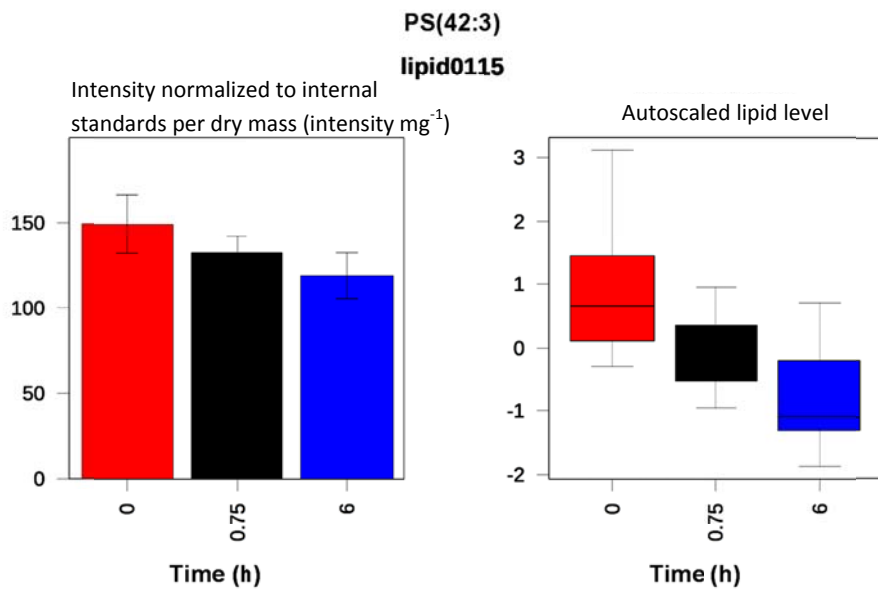
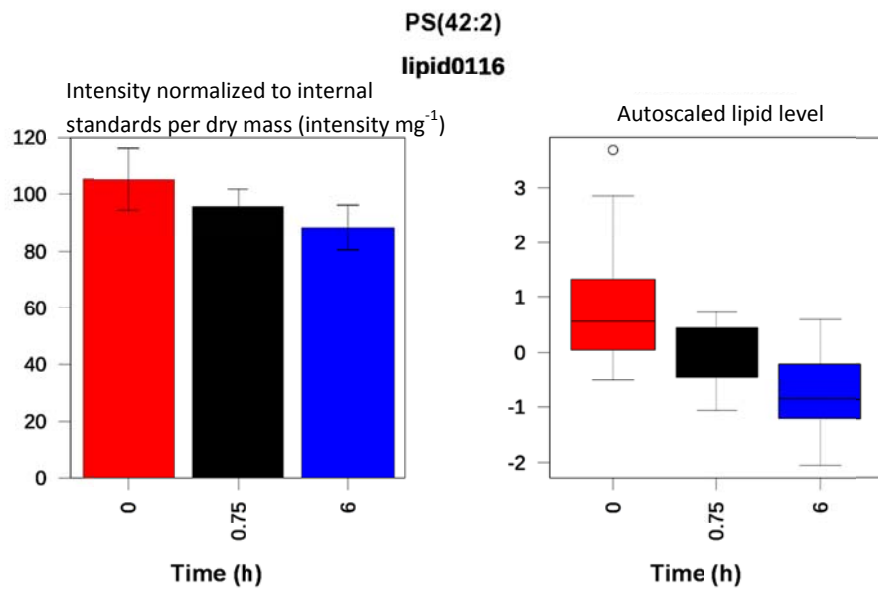


Figure S4.5 – page 122

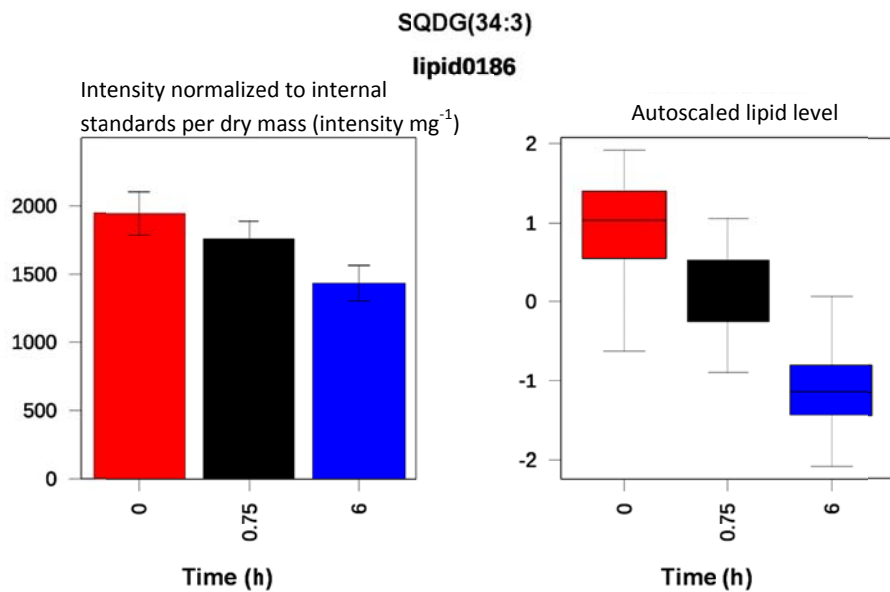
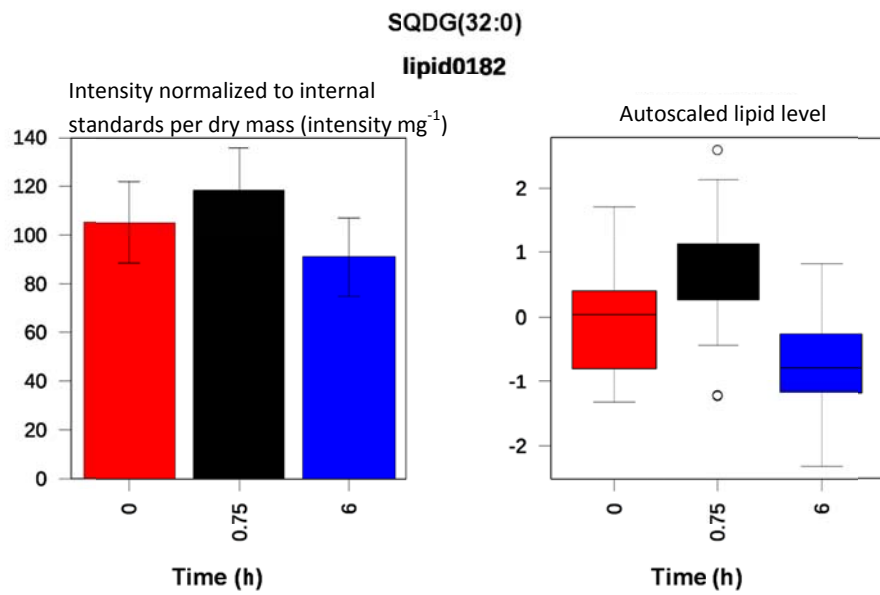


Figure S4.5 – page 123

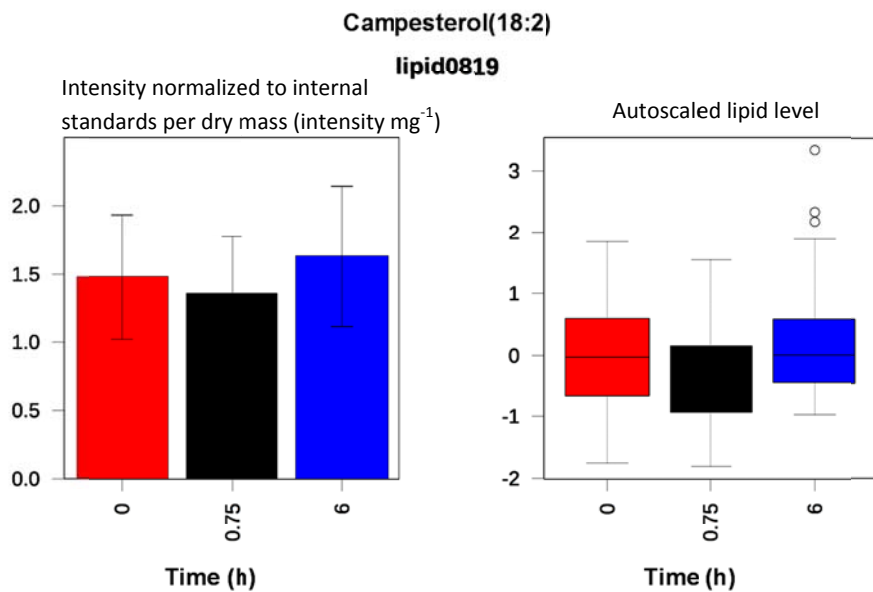
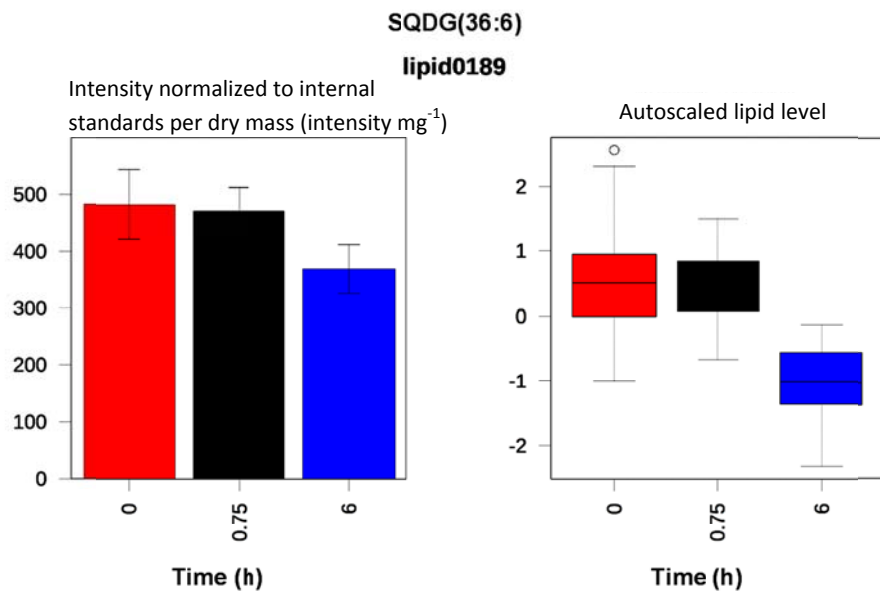


Figure S4.5 – page 124

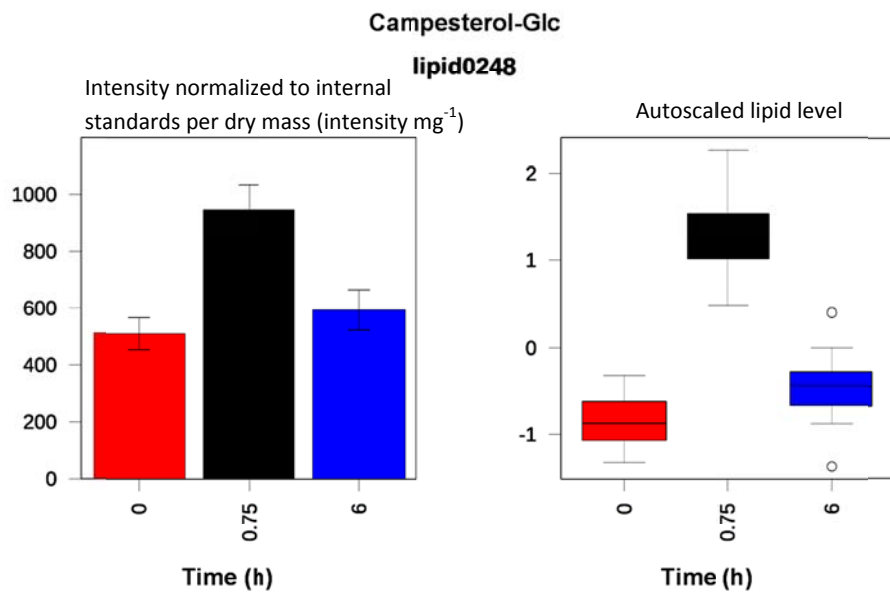
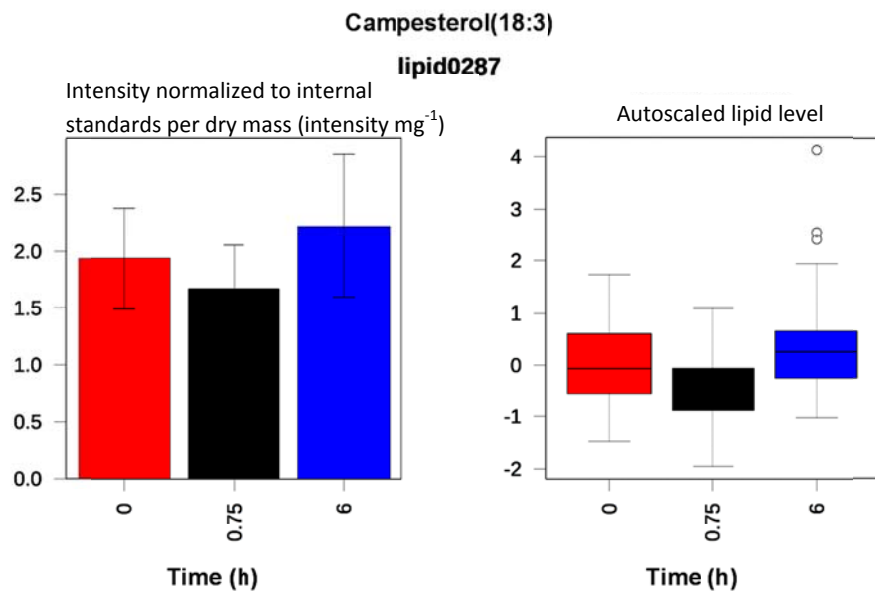
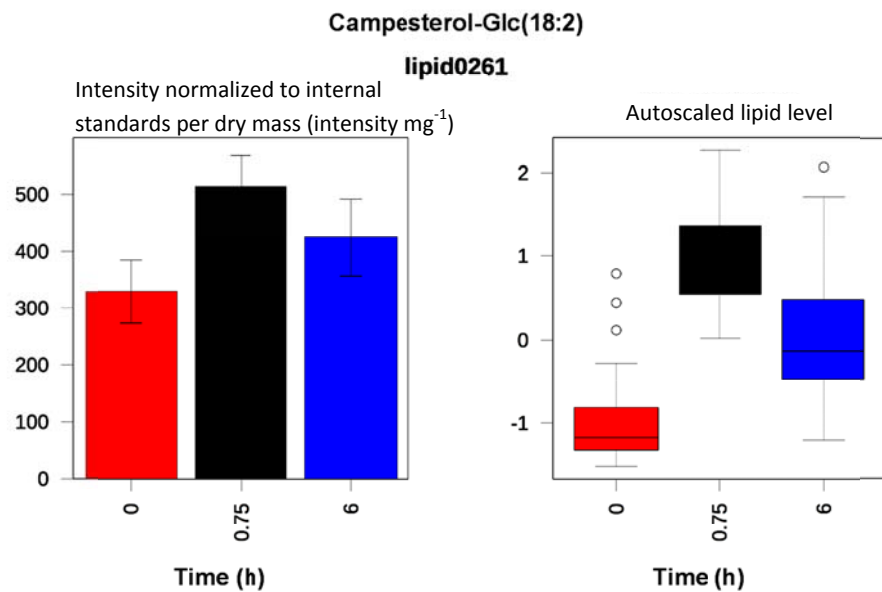
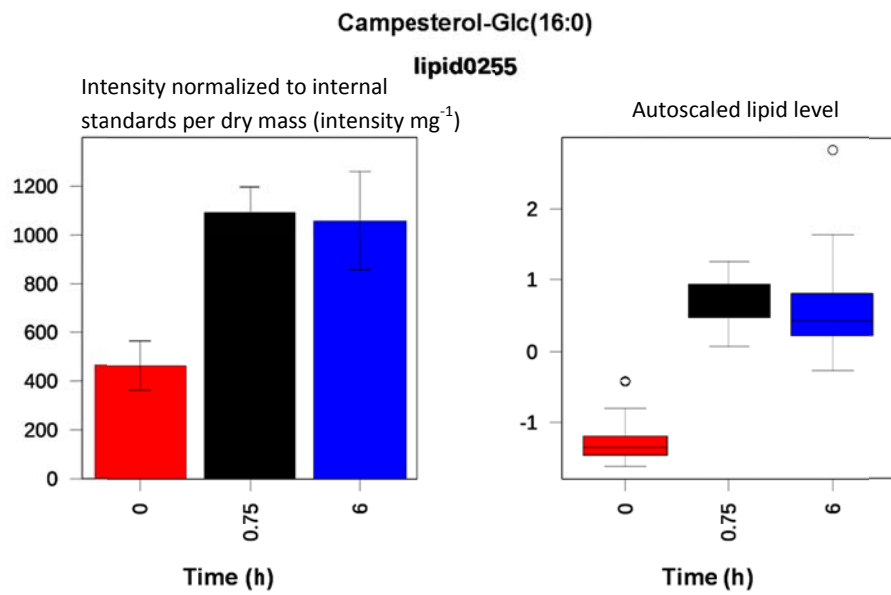


Figure S4.5 – page 125



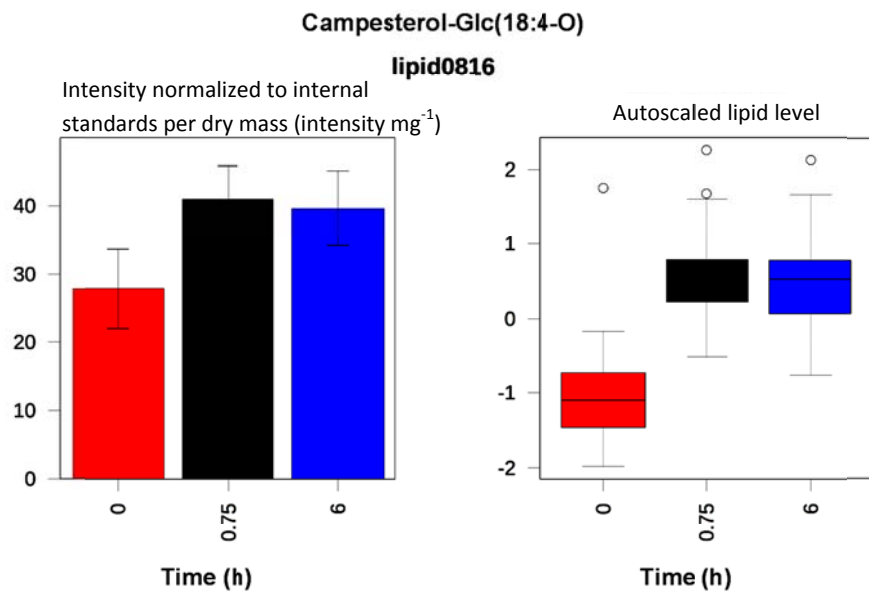
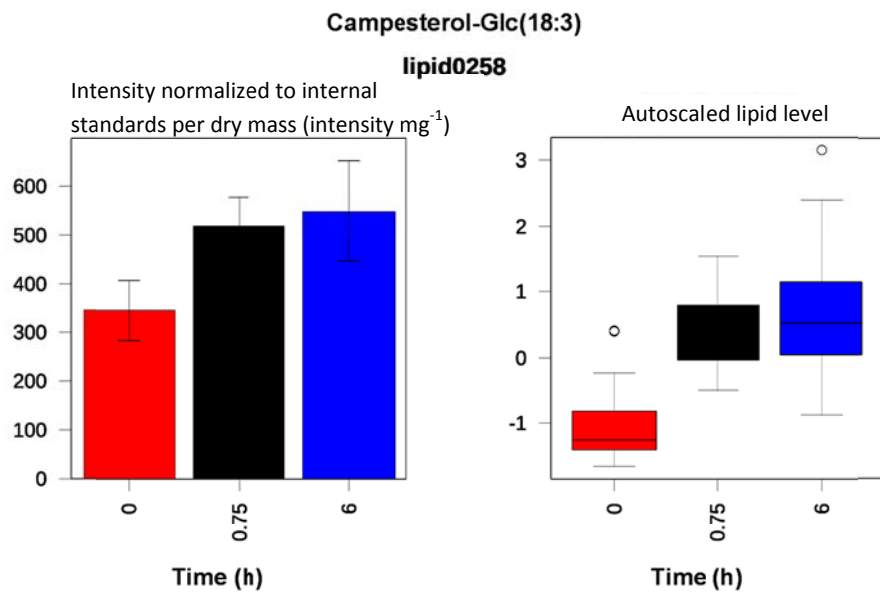


Figure S4.5 – page 127

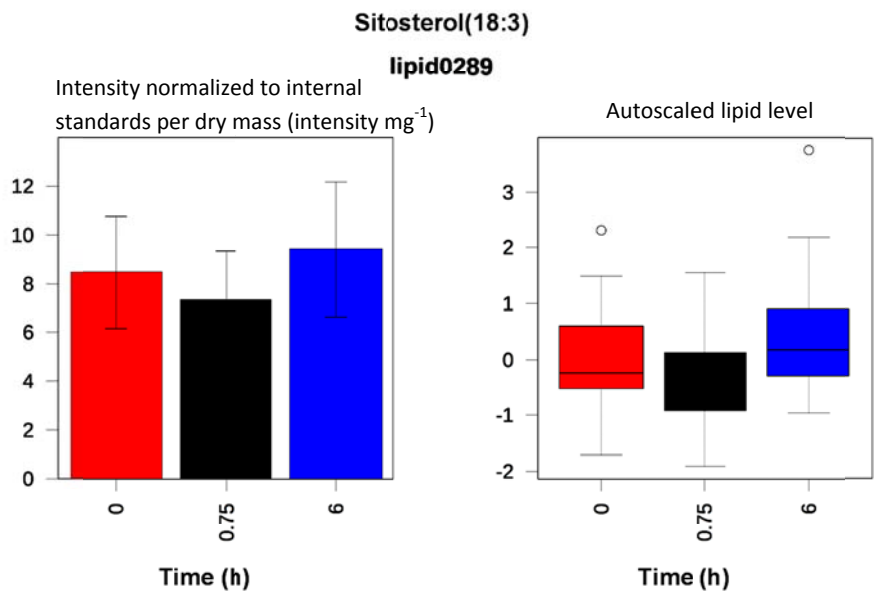
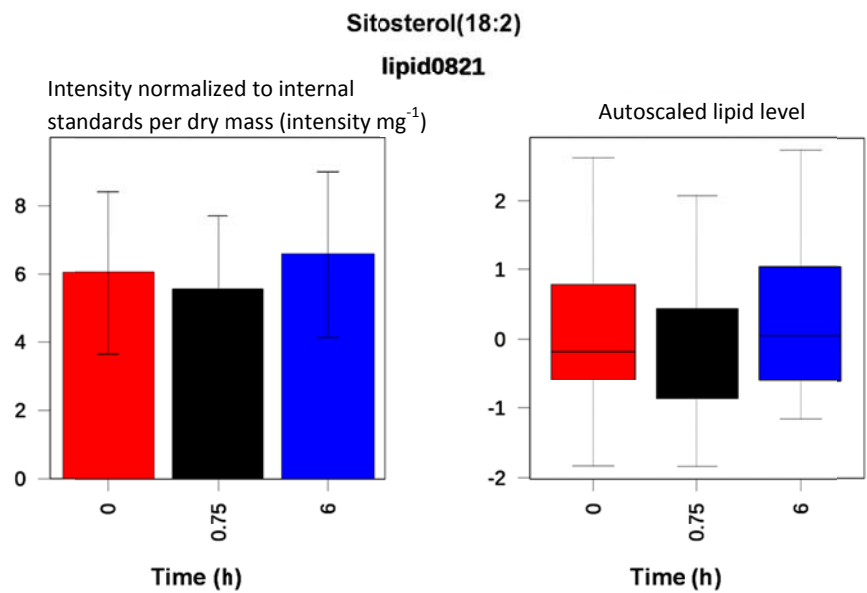


Figure S4.5 – page 128

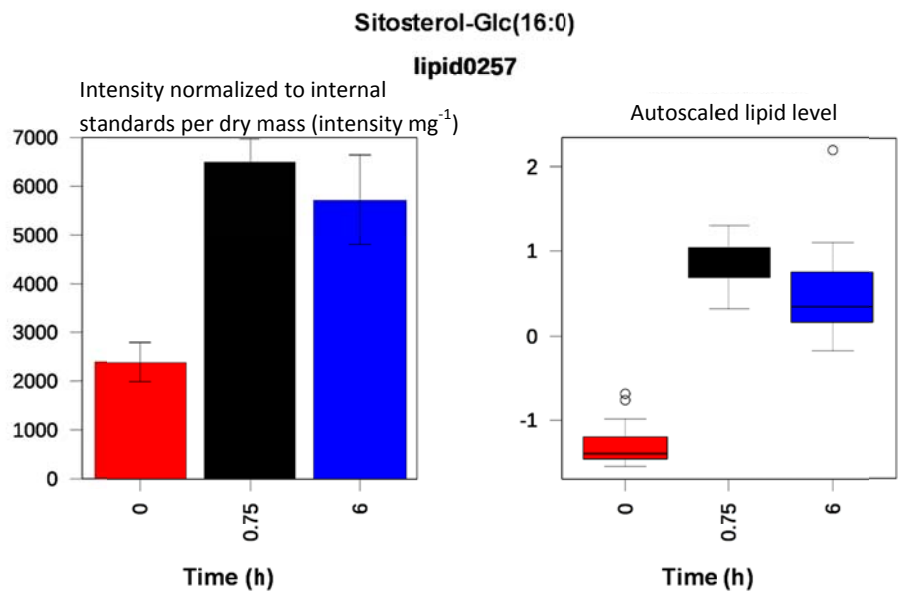
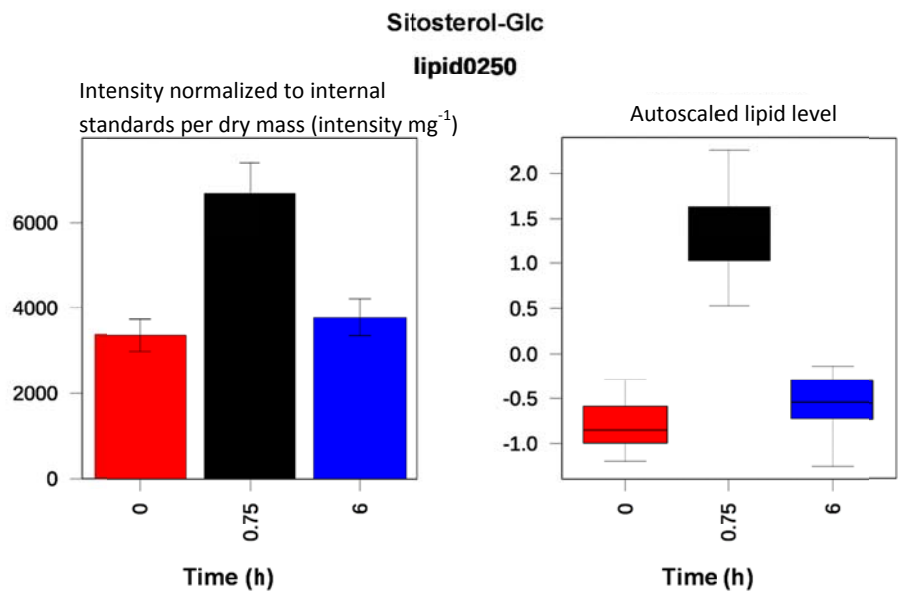
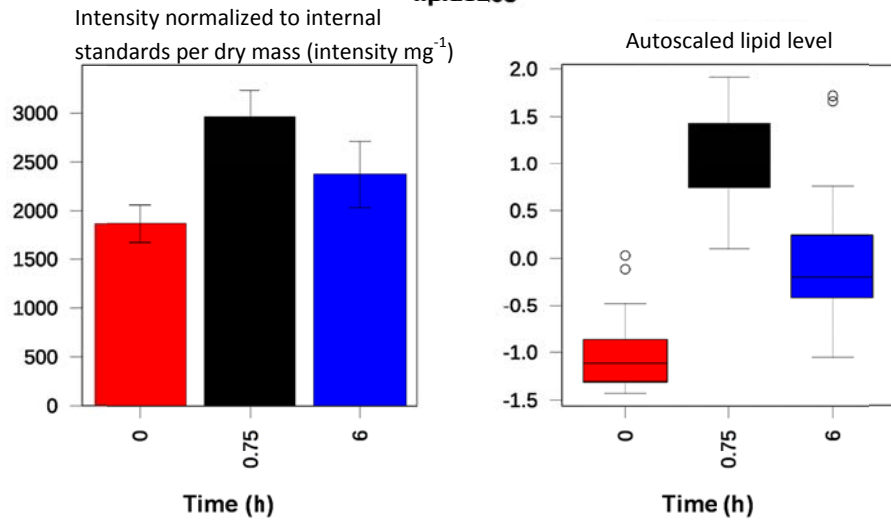


Figure S4.5 – page 129

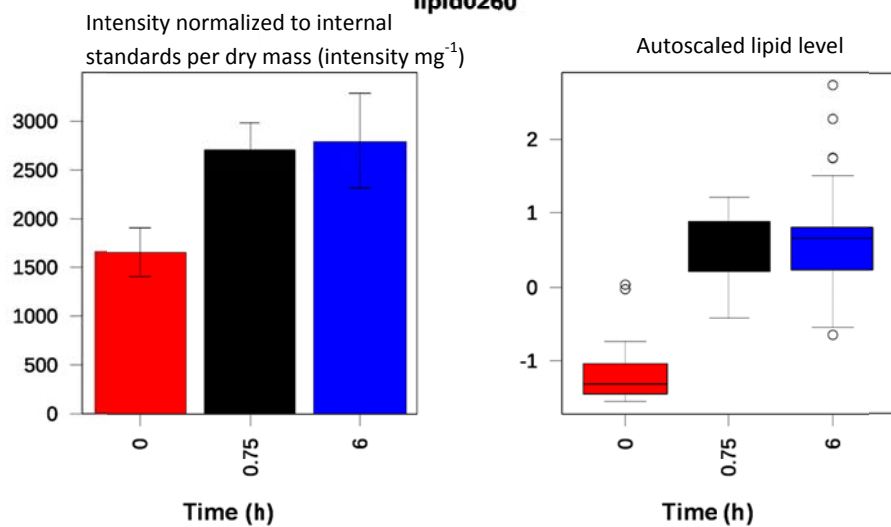
Sitosterol-Glc(18:2)

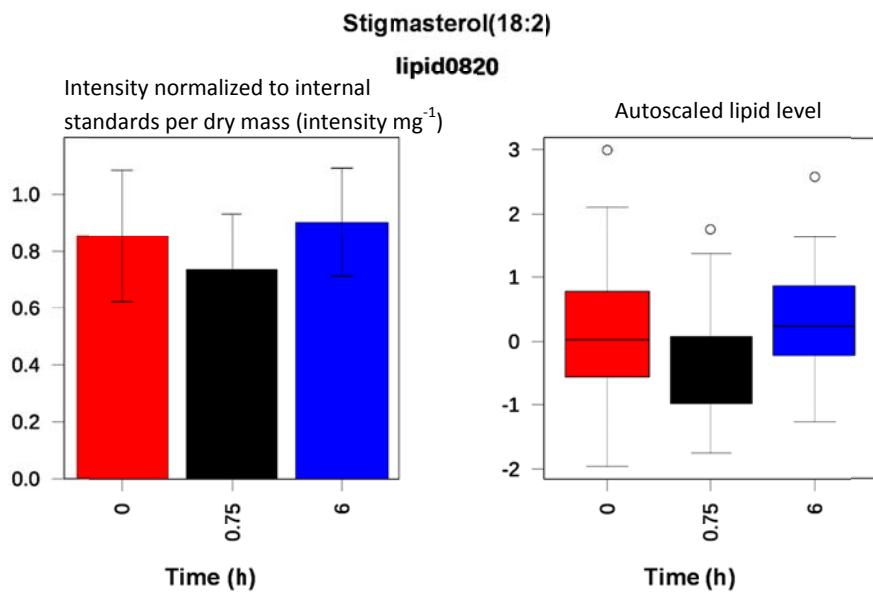
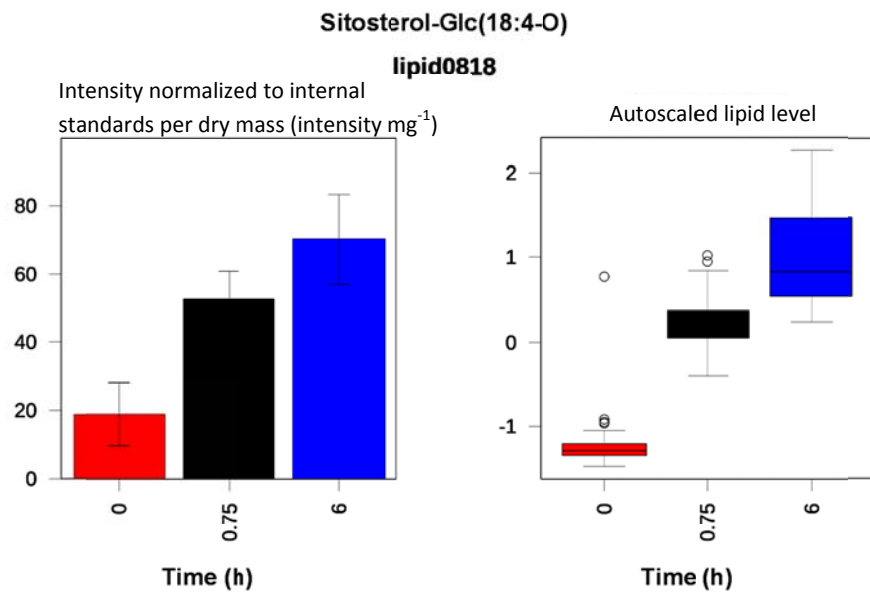
lipid0263



Sitosterol-Glc(18:3)

lipid0260





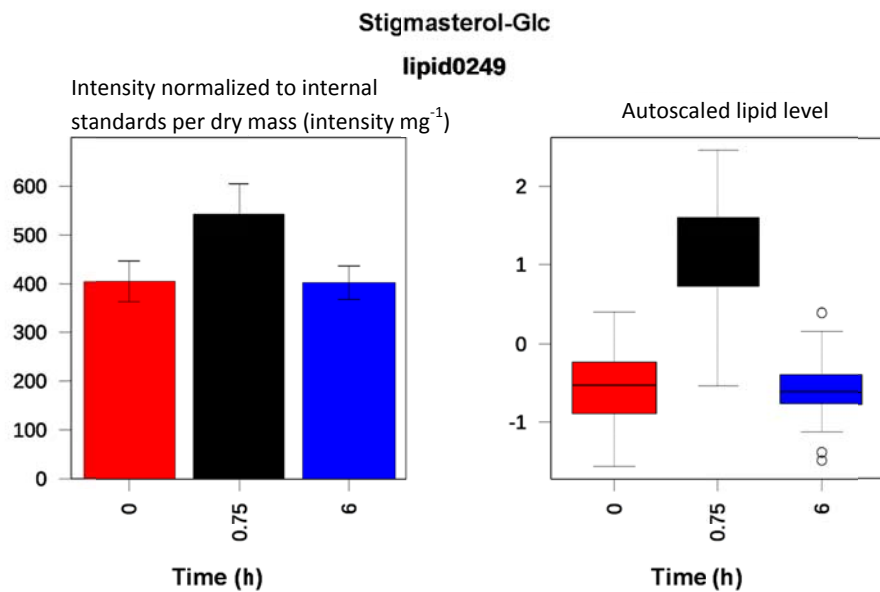
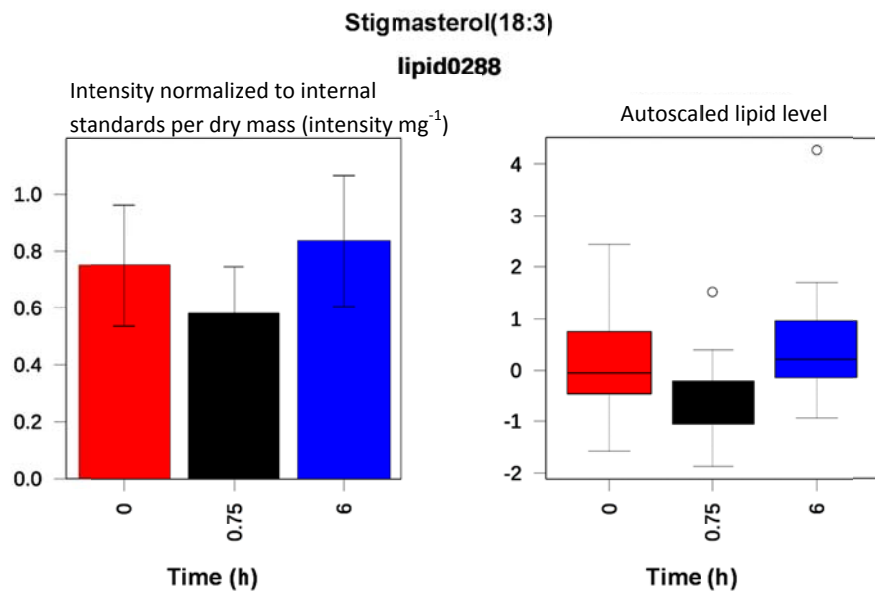


Figure S4.5 – page 132

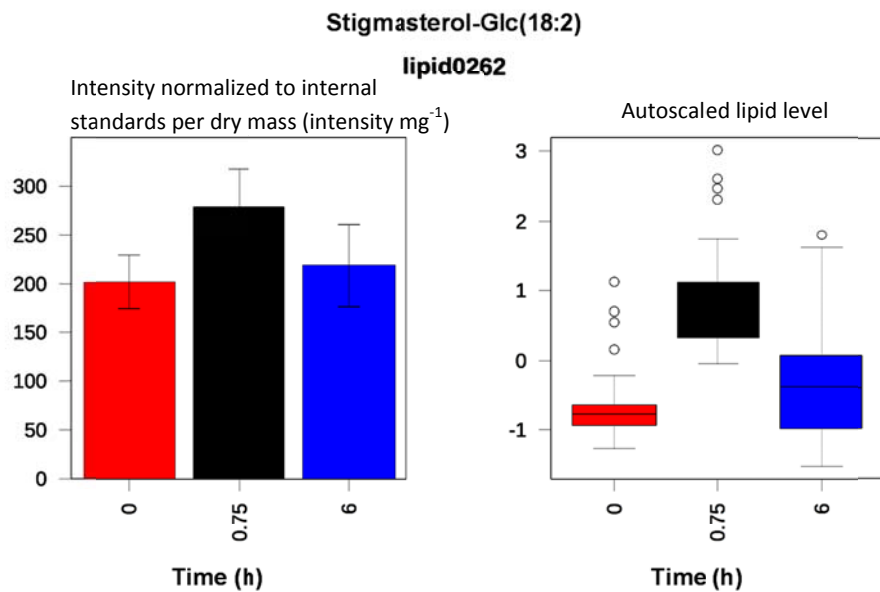
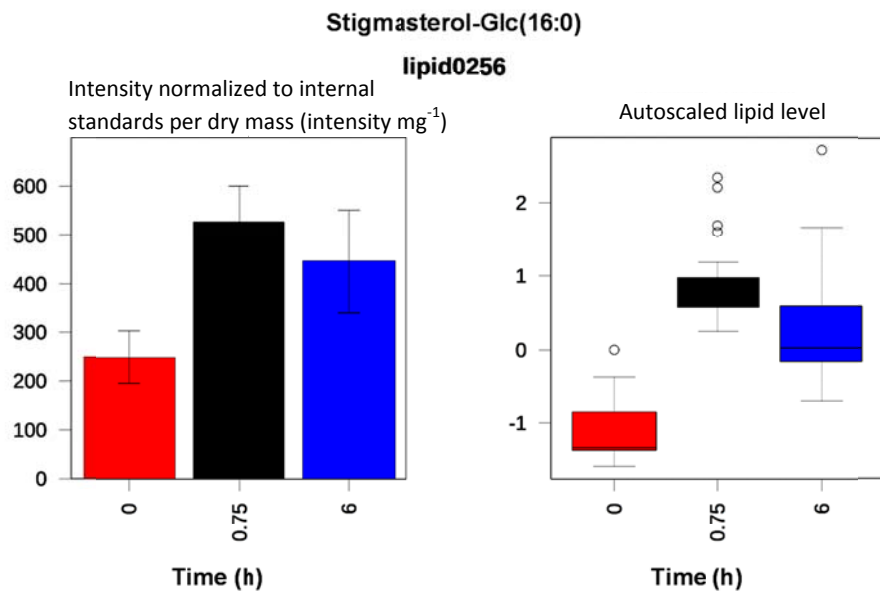
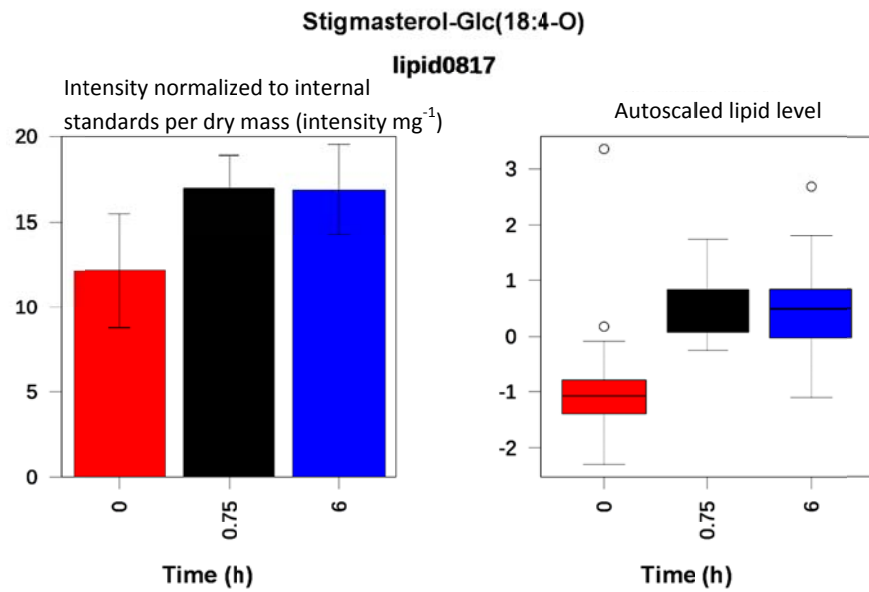
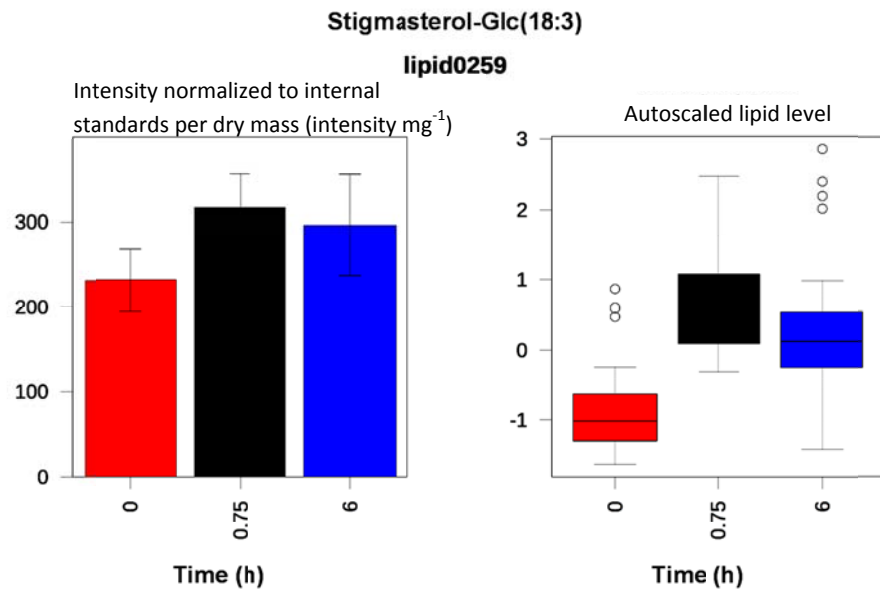


Figure S4.5 – page 133



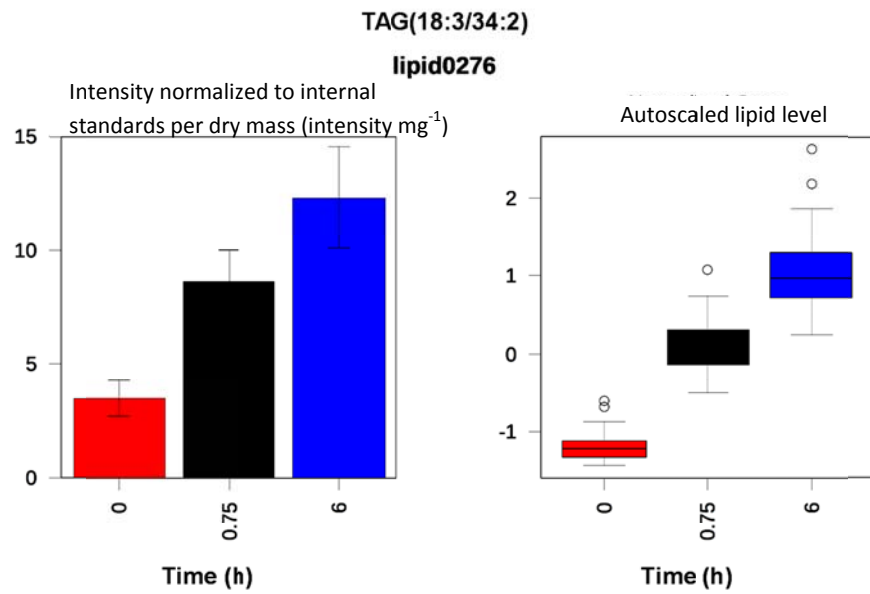
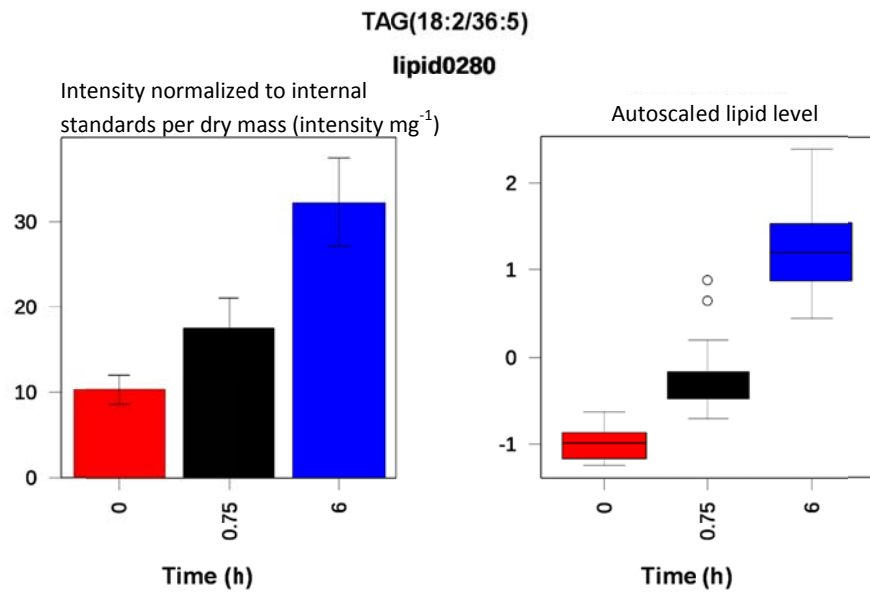
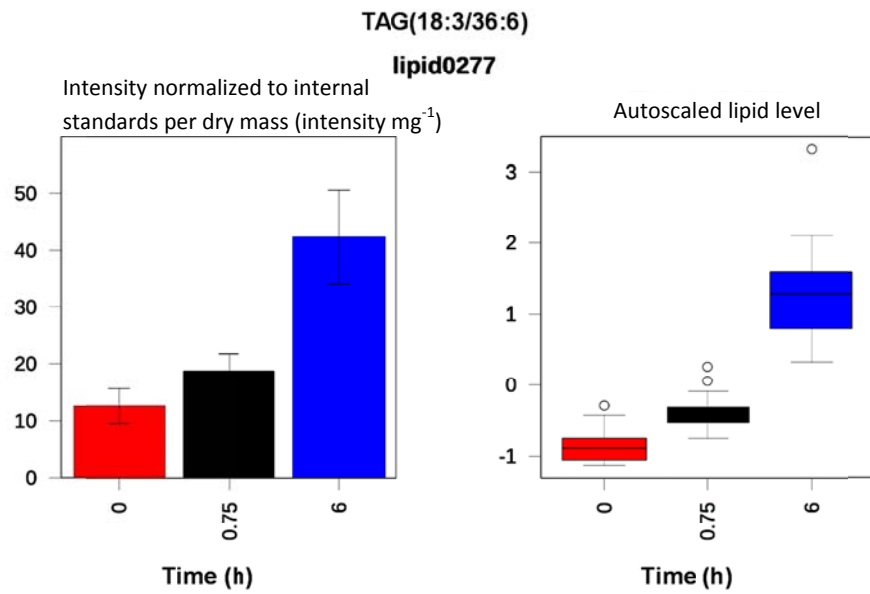
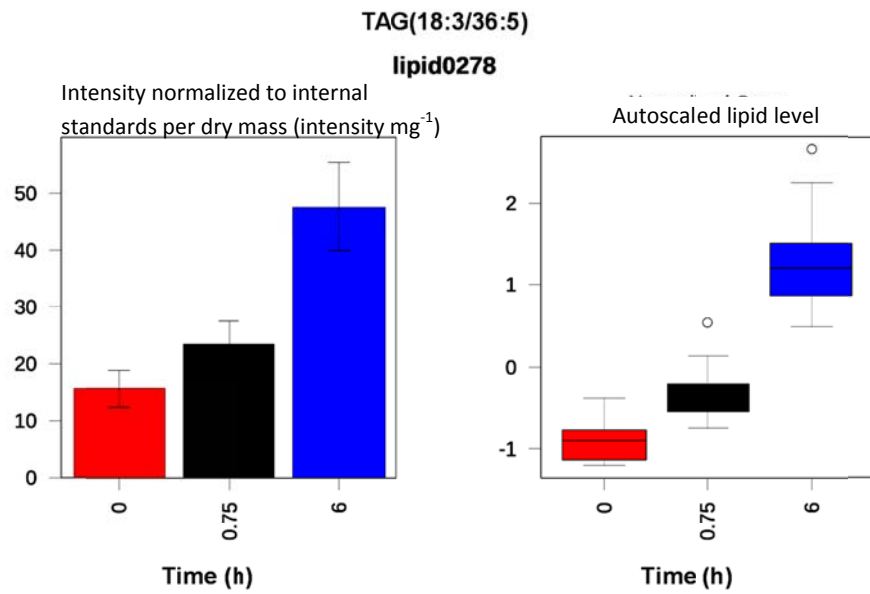


Figure S4.5 – page 135



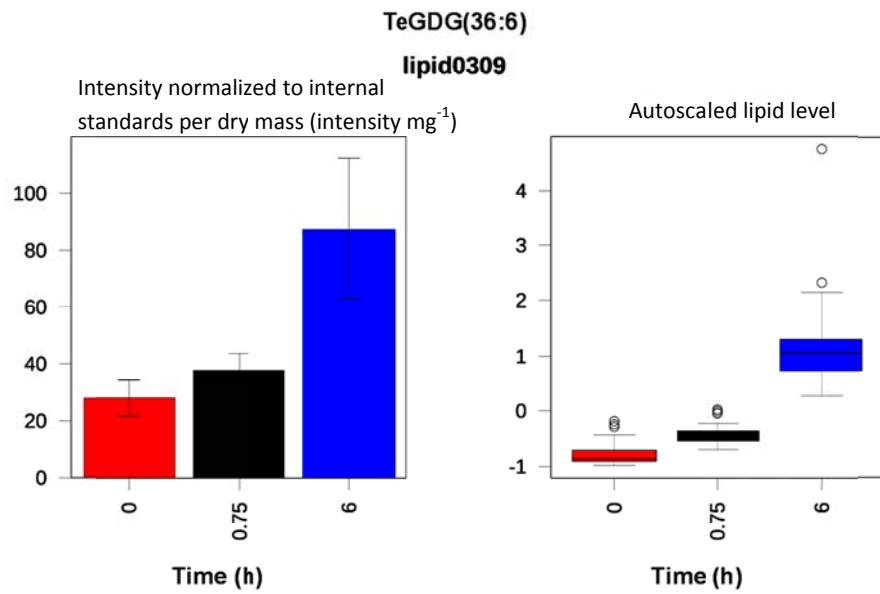
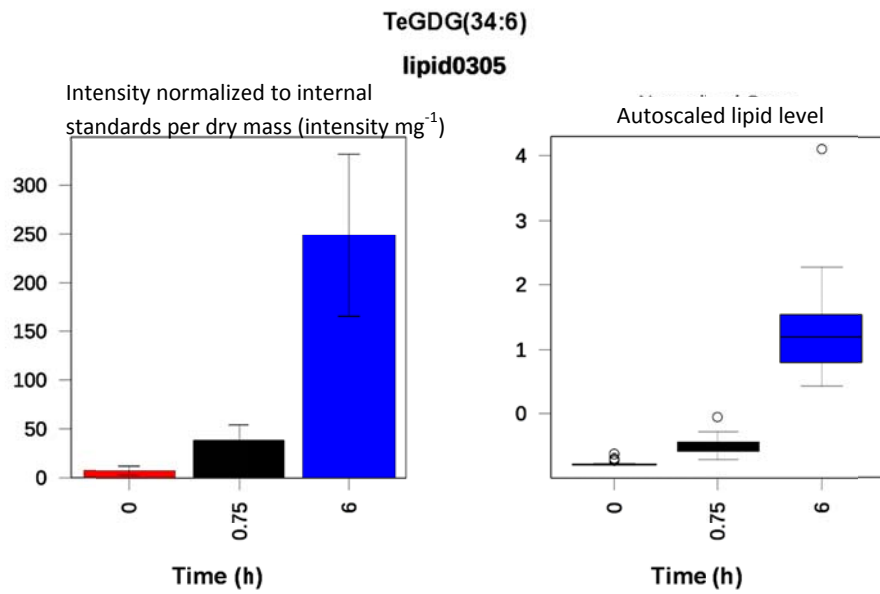


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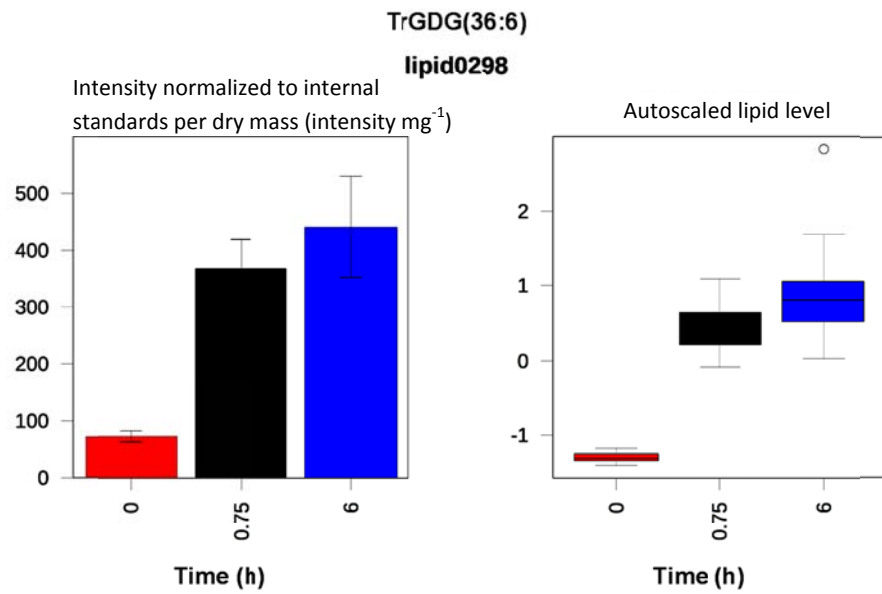
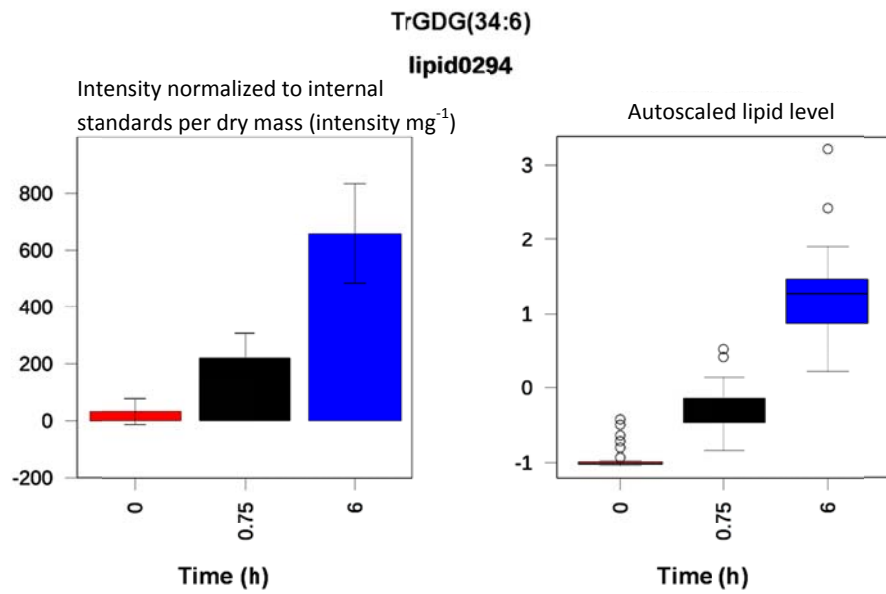


Figure S4.5 – page 138