

## Supplementary Material

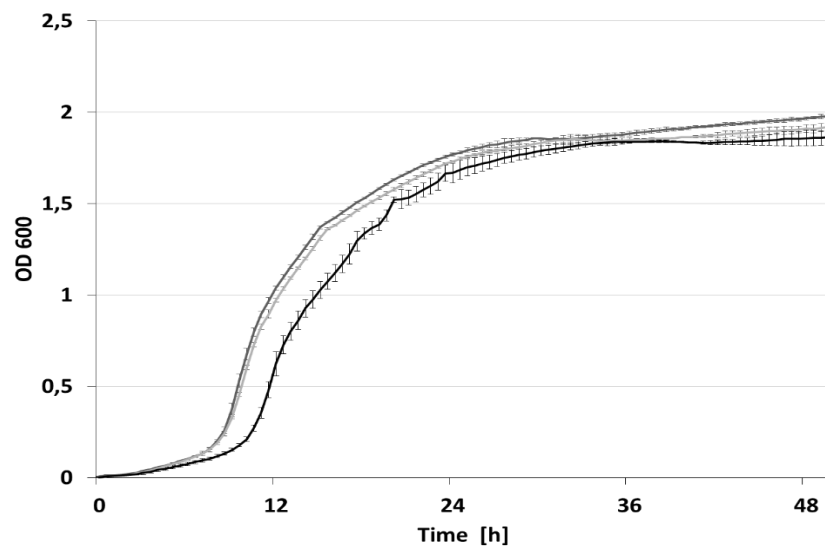
### Lipid production from waste materials in seawater-based medium by the yeast *Yarrowia lipolytica*

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Supplementary Figure 1. Growth curves of *Y. lipolytica* A101 in medium based on seawater with salinity 36 g/L (dark gray), salinity 40 g/L (light gray) and 50 g/L (black). Strains were grown on YPD medium containing 2% glucose as carbon source. Experiment was performed at 28°C under constant agitation using Bioscreen C. The error bars present standard deviations.

Supplementary Table 1. Fatty acid profile (%) of lipid content produced by *Y. lipolytica* A101 and the engineered AJD pADDGA1 strains grown in culture media containing glucose or glycerol as a carbon source prepared on freshwater or seawater basis (SW) in shake-flasks experiment.

		<b>16:0</b>	<b>16:1</b>	<b>18:0</b>	<b>18:1</b>	<b>18:2</b>	<b>others</b>
GLUCOSE	<b>A101</b>	10.56	8.9	10.1	63.4	5.2	1.84
	<b>A101-SW</b>	12.45	8.27	11.95	59.85	5.72	1.76
	<b>DGA1</b>	9.63	8.28	16.12	59.5	4.51	1.96
	<b>DGA1-SW</b>	12.39	18.9	6.07	56.35	4.41	1.88
GLYCEROL	<b>A101</b>	16.83	4.08	24.3	49.02	3.67	2.1
	<b>A101-SW</b>	17.31	4.39	24.05	48.79	3.34	2.12
	<b>DGA1</b>	12.58	4.59	22.26	55	3.51	2.06
	<b>DGA1-SW</b>	15.15	3.93	25	50.59	2.92	2.41