

Supplementary Material

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Supplementary Table S1. The amino acid composition (weight %) of the 3 cryptomonad strains harvested from 500-L PBR cultures at stationary growth phase

Amino acid	CR-MAL07		CR-MAL08-2		CR-MAL10	
	f/2-Si	UCF	f/2-Si	UCF	f/2-Si	UCF
Alanine	8.4	8.1	9.7	8.4	10.7	9.6
Arginine ^a	6.0	9.5	4.9	5.8	4.7	5.5
Aspartic acid	11.8	12.1	10.5	11.5	11.1	11.3
Cystine	1.4	1.1	-	1.3	-	1.2
Glutamic acid	10.9	11.0	10.3	10.2	12.2	10.3
Glycine	6.0	6.2	7.2	5.6	7.2	6.0
Histidine ^a	2.0	2.2	2.5	1.8	2.3	1.6
Isoleucine ^a	3.4	3.3	6.9	4.3	5.3	3.9
Leucine ^a	8.0	8.1	9.9	8.6	9.3	8.5
Lysine ^a	7.2	7.0	5.2	7.3	7.9	8.1
Methionine ^a	1.9	0.4	-	2.2	-	2.5
Phenylalanine ^a	4.8	5.1	5.9	4.9	5.1	4.9
Proline	5.3	4.8	6.5	4.8	4.8	4.7
Serine	6.5	6.2	4.3	6.3	4.2	5.8
Threonine ^a	5.6	5.5	7.3	5.4	6.5	4.9
Tyrosine	5.2	4.8	-	4.5	-	4.1
Valine ^a	5.5	4.8	8.9	7.1	8.7	7.0
Sum	100.0	100.0	100.0	100.0	100.0	100.0

PBR, photobioreactor; UCF, urea-based compound fertilizer.

^aEssential amino acid.

Supplementary Table S2. Relative concentrations of fatty acids (% of total fatty acids) of the 3 cryptomonad strains harvested from 500-L PBR cultures at stationary growth phase

Fatty acid		CR-MAL07		CR-MAL08-2		CR-MAL10	
		f/2-Si	UCF	f/2-Si	UCF	f/2-Si	UCF
Lauric acid	C12:0	-	-	-	0.4	-	0.7
Myristic acid	C14:0	1.7	0.4	1.3	0.6	2.3	0.8
Unid. fatty acid.1	C15:0	0.1	0.2	-	-	-	-
Palmitic acid	C16:0	6.9	9.7	9.1	6.3	12.2	6.9
Palmitoleic acid	C16:1 n-7	0.5	0.2	4.1	0.3	-	-
Heptadecanoic acid	C17:0	-	-	2.2	-	-	-
Stearic acid	C18:0	0.2	0.3	1.3	-	-	-
Oleic acid	C18:1 n-9	0.6	1.5	3.1	0.6	2.6	-
Linoleic acid	C18:2 n-6	1.2	1.3	1.7	2.4	3.4	2.4
Unid. fatty acid.2	C18:3	-	0.8	-	-	-	-
α -Linolenic acid	C18:3 n-3	10.3	7.7	18.4	14.4	26.9	20.4
Eicosapentaenoic acid	C20:5 n-3	20.9	15.3	17	18.3	14.1	19.9
Docosadienoic acid	C22:2 n-6	-	-	-	1.4	-	-
Docosahexaenoic acid	C22:6 n-3	13.2	14.3	11.3	11.8	9.7	8.9
Other unid. fatty acids		44.4	48.3	30.5	43.5	28.8	40
Sum		100.0	100.0	100.0	100.0	100.0	100.0

PBR, photobioreactor; UCF, urea-based compound fertilizer.