

sequence listing ascii.txt
SEQUENCE LISTING

<110> Apt, Kirk
Pfeifer III, Joseph W.
Hansen, Jon Milton
Behrens, Paul Warren
Zirkle, Ross
Stahl, Tracey Lynn

<120> Thraustochytrids, Fatty Acid Compositions, and Methods of Making and Uses Thereof

<130> 2715.003PC00

<140> To be assigned

<141> Herewith

<160> 5

<170> PatentIn version 3.3

<210> 1

<211> 1713

<212> DNA

<213> Schizochytrium sp.

<400> 1

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<210> 2
<211> 924
<212> DNA
<213> Schizochytrium sp.

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<210> 3
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<212> PRT
<213> Schizochytrium sp.

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Asp Asp Met Glu Lys Ile Trp His His Thr Phe Tyr Asn Glu Leu Arg
20 25 30

Val Ala Pro Glu Glu His Pro Val Leu Leu Thr Glu Ala Pro Leu Asn
35 40 45

Pro Lys Ala Asn Arg Glu Arg Met Thr Gln Ile Met Phe Glu Thr Phe
50 55 60

Asn Val Pro Ala Met Tyr Val Asn Ile Gln Ala Val Leu Ser Leu Tyr
65 70 75 80

Ala Ser Gly Arg Thr Thr Gly Ala Val Leu Asp Ser Gly Asp Gly Val
85 90 95

Thr His Thr Val Pro Ile Tyr Glu Gly Tyr Ala Leu Pro His Ala Val
100 105 110

Leu Arg Ile Asp Leu Ala Gly Arg Asp Leu Thr Asp Tyr Met Met Lys
115 120 125

Ile Leu Thr Glu Arg Gly Tyr Ser Phe Thr Thr Thr Ala Glu Arg Glu
130 135 140

Ile Val Arg Asp Ile Lys Glu Lys Leu Cys Tyr Val Ala Leu Asp Phe
145 150 155 160

Asp Gln Glu Met Lys Thr Ala Ala Glu Ser Ser Ser Leu Glu Lys Ser
165 170 175

Tyr Glu Leu Pro Asp Gly Asn Val Ile Thr Ile Gly Asn Glu Arg Phe
180 185 190

Arg Cys Pro Glu Val Leu Phe Gln Pro Ser Phe Ile Gly Lys Glu Ala
195 200 205

Ala Gly Val His Glu Thr Met Phe Gln Thr Ile Met Lys Cys Asp Val
210 215 220

Asp Ile Arg Lys Asp Leu Tyr Ala Asn Ile Val Met Ser Gly Gly Ser
225 230 235 240

Thr Met Tyr Glu Gly Ile Ala Ala Arg Leu Glu Lys Glu Met Val Ser
245 250 255

Leu Ala Pro Ser Thr Met Lys Ile Lys Val Val Ala Pro Pro Glu Arg
260 265 270

Lys Tyr Ser Val Trp Ile Gly Gly Ser Ile Leu Ala Ser Leu Ser Thr
275 280 285

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Phe Gln Gln
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<211> 918
<212> DNA
<213> Schizochytrium sp.

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tttgccagc tcttccgccc agacaacttc gtcttcgggc agacgggacg cggtacaac 180
tgggccaagg gccactacac tgagggcgcg gagcttatcg actcgggtgct cgacgtgggtg 240
cgcaaggagg cagagtcgtg cgactgcctg cagggtctcc agatcaccca ctgcctcggc 300
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cgcttcccgg gccagctcaa ctccgacgtg cgcaagctgg ccgtcaacct ggtgcccttt 660
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taccgcgccc tgaccgttcc ggagctcacg cagcaggcgt ttgacgctaa gaacatgatg 780
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<212> PRT
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20 25 30

Thr Met Asp Ser Val Arg Ala Gly Pro Phe Gly Gln Leu Phe Arg Pro
35 40 45

Asp Asn Phe Val Phe Gly Gln Thr Gly Ala Gly Asn Asn Trp Ala Lys
50 55 60

Gly His Tyr Thr Glu Gly Ala Glu Leu Ile Asp Ser Val Leu Asp Val
65 70 75 80

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Val Arg Lys Glu Ala Glu Ser Cys Asp Cys Leu Gln Gly Phe Gln Ile
 85 90 95
 Thr His Ser Leu Gly Gly Gly Thr Gly Ser Gly Met Gly Thr Leu Leu
 100 105 110
 Ile Ser Lys Ile Arg Glu Glu Tyr Pro Asp Arg Ile Met Leu Thr Phe
 115 120 125
 Ser Ile Val Pro Ser Pro Lys Val Ser Asp Thr Val Val Glu Pro Tyr
 130 135 140
 Asn Ala Thr Leu Ser Val His Gln Leu Val Glu Asn Ala Asp Glu Val
 145 150 155 160
 Met Val Leu Asp Asn Glu Ala Leu Tyr Asp Ile Cys Phe Arg Thr Leu
 165 170 175
 Lys Leu Thr Thr Pro Thr Tyr Gly Asp Leu Asn His Leu Val Cys Ala
 180 185 190
 Ala Met Ser Gly Cys Thr Cys Cys Leu Arg Phe Pro Gly Gln Leu Asn
 195 200 205
 Ser Asp Leu Arg Lys Leu Ala Val Asn Leu Val Pro Phe Pro Arg Leu
 210 215 220
 His Phe Phe Met Ile Gly Phe Ser Pro Leu Thr Ser Arg Gly Ser Gln
 225 230 235 240
 Gln Tyr Arg Ala Leu Thr Val Pro Glu Leu Thr Gln Gln Ala Phe Asp
 245 250 255
 Ala Lys Asn Met Met Cys Ala Ala Asp Pro Arg His Gly Arg Tyr Leu
 260 265 270
 Thr Ala Thr Thr Leu Phe Arg Gly Arg Met Ser Thr Lys Glu Val Asp
 275 280 285
 Glu Gln Met Leu Asn Ile Gln Asn Lys Asn Ser Ser Tyr Phe Val Glu
 290 295 300
 Trp Ile Pro
 305