SEQUENCE LISTING

<110> Zhang, Shuguang
Rich, Alexander
Corin, Karolina
Tegler, Lotta T.

<120> Water Soluble Membrane Proteins and
Methods for the Preparation and Use Thereof

<130> 4041.3017 WO

<140> 13/403,725
<141> 2012-02-23

<150> US 61/445,740
<151> 2011-02-23

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Leu Leu Ala Tyr Val Leu Val Leu Thr Glu Asn Ile Leu Ile Thr Ala
35 40 45
Ile Arg Asn His Pro Thr Leu His Lys Pro Met Tyr Phe Phe Leu Ala
50 55 60
Asn Met Ser Glu Phe Leu Glu Ile Trp Tyr Val Thr Val Thr Ile Pro
65 70 75 80
Lys Met Leu Ala Gly Phe Ile Gly Ser Glu Glu Asn His Gly Gln Leu
85 90 95
Ile Ser Phe Glu Ala Cys Met Thr Gln Leu Tyr Phe Phe Leu Gly Leu
100 105 110
Gly Cys Thr Glu Cys Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr
115 120 125
Val Ala Ile Cys His Pro Leu His Tyr Pro Val Ile Val Ser Ser Arg
130 135 140
Leu Cys Val Gln Met Ala Ala Gly Ser Trp Ala Gly Gly Phe Gly Ile
145 150 155 160
Ser Met Val Lys Val Phe Leu Ile Ser Arg Leu Tyr Thr Cys Gly Pro
165 170 175
Asn Thr Ile Asn His Phe Phe Cys Asp Val Ser Pro Leu Leu Asn Leu
180 185 190
Ser Cys Thr Asp Met Ser Thr Ala Glu Leu Thr Asp Phe Ile Leu Ala
195 200 205
Ile Phe Ile Leu Leu Gly Pro Leu Ser Val Thr Gly Ala Ser Tyr Met
210 215 220
Ala Ile Thr Gly Ala Val Met Arg Ile Pro Ser Ala Ala Gly Arg His
225 230 235 240
Lys Ala Phe Ser Thr Cys Ala Ser His Leu Thr Val Val Ile Ile Phe
245 250 255
Tyr Ala Ala Ser Ile Phe Ile Tyr Ala Arg Pro Lys Ala Leu Ser Ala
260 265 270

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Phe Asp Thr Asn Lys Leu Val Ser Val Leu Tyr Ala Val Ile Val Pro
        275                 280                 285
Leu Leu Asn Pro Ile Ile Tyr Cys Leu Arg Asn Gln Glu Val Lys Lys
    290                 295                 300
Ala Leu Arg Arg Thr Leu His Leu Ala Gln Gly Gln Asp Ala Asn Thr
305                 310                 315                 320
Lys Lys Ser Ser Arg Asp Gly Gly Ser Ser Gly Thr Glu Thr Ser Gln
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Val Ala Pro Ala
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            20                  25                  30
Leu Gln Ala Tyr Val Gln Thr Leu Thr Glu Asn Ile Gln Thr Ile Thr
        35                  40                  45
Ala Ile Arg Asn His Pro Thr Leu His Lys Pro Met Tyr Tyr Phe Leu
    50                  55                  60
Ala Asn Met Ser Phe Tyr Leu Glu Thr Trp Tyr Thr Thr Val Thr Thr
65                  70                  75                  80
Pro Lys Met Gln Ala Gly Tyr Ile Gly Ser Glu Glu Asn His Gly Gln
                85                  90                  95
Leu Ile Ser Phe Glu Ala Cys Met Thr Gln Leu Tyr Phe Phe Gln Gly
            100                 105                 110
Leu Gly Cys Thr Glu Cys Thr Leu Leu Ala Val Met Ala Tyr Asp Arg
        115                 120                 125
Tyr Val Ala Thr Cys His Pro Leu His Tyr Pro Val Ile Val Ser Ser
    130                 135                 140
Arg Gln Cys Val Gln Met Ala Ala Gly Ser Trp Ala Gly Gly Phe Gly
145                 150                 155                 160
Thr Ser Met Thr Val Lys Val Tyr Gln Ile Ser Arg Leu Ser Tyr Cys
                165                 170                 175
Gly Pro Asn Thr Ile Asn His Phe Phe Cys Asp Val Ser Pro Leu Leu
            180                 185                 190
Asn Leu Ser Cys Thr Asp Met Ser Thr Ala Glu Leu Thr Asp Phe Ile
        195                 200                 205
Leu Ala Ile Phe Ile Leu Leu Gly Pro Leu Ser Val Thr Gly Ala Ser
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Tyr Met Ala Ile Thr Gly Ala Val Met Arg Ile Pro Ser Ala Ala Gly
225                 230                 235                 240
Arg His Lys Ala Phe Ser Thr Cys Ala Ser His Leu Thr Thr Val Ile
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Thr Tyr Tyr Ala Ala Ser Ile Tyr Thr Tyr Ala Arg Pro Lys Ala Leu
            260                 265                 270
Ser Ala Phe Asp Thr Asn Lys Leu Val Ser Val Leu Tyr Ala Val Ile
        275                 280                 285
Val Pro Leu Leu Asn Pro Ile Ile Tyr Cys Leu Arg Asn Gln Glu Val
    290                 295                 300
Lys Lys Ala Leu Arg Arg Thr Leu His Leu Ala Gln Gly Asp Ala Asn
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Thr Lys Lys Ser Ser Arg Asp Gly Gly Ser Ser Gly Thr Glu Thr Ser
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Val Thr Gly Ala Ser Tyr Met Ala Ile Thr Gly Ala Val
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Tyr Tyr Ala Ala Ser Ile Tyr Thr Tyr
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Asn Pro Ile Ile Tyr Cys Leu Arg Asn
20 25

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Cys Asp Glu Phe Gly Ala Asx Cys Asp Glu Phe Gly Ala Ala Asx Cys
20 25 30
Asp Glu Phe Gly Ala Asx Cys Asp Glu Phe Gly Ala Asx Cys Asp Glu
35 40 45
Phe Gly Ala Asx Cys Asp Glu Phe Gly Ala Asx Cys Asp Glu Phe Gly
50 55 60
Ala Asx Cys Glu Asp Phe Gly Ala Asx Cys Asp Glu Phe Gly Ala Asx
65 70 75 80
Cys Asp Glu Gly Gly Ala Asx Cys Ala Asx Cys Asp Glu Phe Gly Ala
85 90 95
Asx Cys Asp Glu Phe Gly Ala Asx Cys Asp Glu Phe Gly Ala Asx Cys
100 105 110
Asp Ala Asx Cys Asp Glu Phe Gly Ala Asx Cys Asp Glu Phe Gly Ala
115 120 125
Asx Cys Asp Glu Phe Gly Ala Asx Cys Asp Glu Phe Gly Ala Ala Asx
130 135 140
Cys Asp Glu Phe Gly Ala Asx Cys Asp Glu Phe Gly Ala Asx Cys Asp
145 150 155 160
Glu Phe Gly Ala Asx Cys Asp Ala Asx Cys Asp Glu Phe Gly Ala Asx
165 170 175
Cys Asp Glu Phe Gly Ala Asx Cys Asp Glu Phe Gly Ala Asx Cys

180 185 190