SEQUENCE LISTING

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Ruzek, Melanie
O'Hara, Denise
Chen, Jianqing

<120> Antigens Associated with Inflammatory Bowel Disease

<130> 5026-P05632WO01

<140> PCT/US2012/058574
<141> 2012-10-03

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<400> 2
Ser Gly Ser Gly Gly Ser
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Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Leu Phe
20 25 30
Thr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Lys Ser Thr His Leu Tyr Leu Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110
Leu Val Thr Val Ser Ser
115

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<220>
<223> F8 antibody VL domain

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Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
1 5 10 15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Met Pro

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            20                  25                  30
Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
        35                  40                  45
Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
    50                  55                  60
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65                  70                  75                  80
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Met Arg Gly Arg Pro
                85                  90                  95
Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100                 105
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<213> Artificial Sequence

<220>
<223> linker between VH domain and VL domain of F8 antibody

<400> 9
Gly Gly Ser Gly Gly
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<210> 10
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Linker between VL domain of F8 antibody and IL-10

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<212> PRT
<213> Homo sapiens

<400> 11
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 1               5                  10                  15
Gly Asn Leu Pro Asn Met Leu Arg Asp Leu Arg Asp Ala Phe Ser Arg
            20                  25                  30
Val Lys Thr Phe Phe Gln Met Lys Asp Gln Leu Asp Asn Leu Leu Leu
        35                  40                  45
Lys Glu Ser Leu Leu Glu Asp Phe Lys Gly Tyr Leu Gly Cys Gln Ala
    50                  55                  60
Leu Ser Glu Met Ile Gln Phe Tyr Leu Glu Glu Val Met Pro Gln Ala
65                  70                  75                  80
Glu Asn Gln Asp Pro Asp Ile Lys Ala His Val Asn Ser Leu Gly Glu
                85                  90                  95
Asn Leu Lys Thr Leu Arg Leu Arg Leu Arg Arg Cys His Arg Phe Leu
            100                 105                 110
Pro Cys Glu Asn Lys Ser Lys Ala Val Glu Gln Val Lys Asn Ala Phe
        115                 120                 125
Asn Lys Leu Gln Glu Lys Gly Ile Tyr Lys Ala Met Ser Glu Phe Asp
    130                 135                 140
Ile Phe Ile Asn Tyr Ile Glu Ala Tyr Met Thr Met Lys Ile Arg Asn
145                 150                 155                 160
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<211> 231
<212> PRT
<213> Homo sapiens

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20 25 30
Thr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Lys Ser Thr His Leu Tyr Leu Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110
Leu Val Thr Val Ser Ser Gly Gly Ser Gly Gly Glu Ile Val Leu Thr
115 120 125
Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu
130 135 140
Ser Cys Arg Ala Ser Gln Ser Val Ser Met Pro Phe Leu Ala Trp Tyr
145 150 155 160
Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser
165 170 175
Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly
180 185 190
Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala
195 200 205
Val Tyr Tyr Cys Gln Gln Met Arg Gly Arg Pro Pro Thr Phe Gly Gln
210 215 220
Gly Thr Lys Val Glu Ile Lys
225 230

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<213> Artificial Sequence

<220>
<223> F8-IL10

<400> 13
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Leu Phe
20 25 30
Thr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Lys Ser Thr His Leu Tyr Leu Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110
Leu Val Thr Val Ser Ser Gly Gly Ser Gly Gly Glu Ile Val Leu Thr
115 120 125
Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu
130 135 140
Ser Cys Arg Ala Ser Gln Ser Val Ser Met Pro Phe Leu Ala Trp Tyr
145 150 155 160
Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser
165 170 175
Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly

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                180                 185                 190
Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala
        195                 200                 205
Val Tyr Tyr Cys Gln Gln Met Arg Gly Arg Pro Pro Thr Phe Gly Gln
    210                 215                 220
Gly Thr Lys Val Glu Ile Lys Ser Ser Ser Ser Gly Ser Ser Ser Ser
225                 230                 235                 240
Gly Ser Ser Ser Ser Gly Ser Pro Gly Gln Gly Thr Gln Ser Glu Asn
                245                 250                 255
Ser Cys Thr His Phe Pro Gly Asn Leu Pro Asn Met Leu Arg Asp Leu
            260                 265                 270
Arg Asp Ala Phe Ser Arg Val Lys Thr Phe Phe Gln Met Lys Asp Gln
        275                 280                 285
Leu Asp Asn Leu Leu Leu Lys Glu Ser Leu Leu Glu Asp Phe Lys Gly
    290                 295                 300
Tyr Leu Gly Cys Gln Ala Leu Ser Glu Met Ile Gln Phe Tyr Leu Glu
305                 310                 315                 320
Glu Val Met Pro Gln Ala Glu Asn Gln Asp Pro Asp Ile Lys Ala His
                325                 330                 335
Val Asn Ser Leu Gly Glu Asn Leu Lys Thr Leu Arg Leu Arg Leu Arg
            340                 345                 350
Arg Cys His Arg Phe Leu Pro Cys Glu Asn Lys Ser Lys Ala Val Glu
        355                 360                 365
Gln Val Lys Asn Ala Phe Asn Lys Leu Gln Glu Lys Gly Ile Tyr Lys
    370                 375                 380
Ala Met Ser Glu Phe Asp Ile Phe Ile Asn Tyr Ile Glu Ala Tyr Met
385                 390                 395                 400
Thr Met Lys Ile Arg Asn
                405
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