

Untitled.ST25.txt
SEQUENCE LISTING

<110> Universität Ulm
<120> A monomeric red fluorescent protein with a large Stokes shift
<130> P 49 262 US
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<170> PatentIn version 3.3
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<212> PRT
<213> Entacmaea quadricolor
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Asn Pro Tyr Met Gly Thr Gln Thr Met Arg Ile Lys Val Ile Glu Gly
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Gly Pro Leu Pro Phe Ala Phe Asp Ile Leu Ala Thr Ser Phe Met Tyr
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Gly Ser Arg Thr Phe Ile Lys Tyr Pro Lys Gly Ile Pro Asp Phe Phe
65 70 75 80

Lys Gln Ser Phe Pro Glu Gly Phe Thr Trp Glu Arg Val Thr Arg Tyr
85 90 95

Glu Asp Gly Gly Val Ile Thr Val Met Gln Asp Thr Ser Leu Glu Asp
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Gly Cys Leu Val Tyr His Ala Gln Val Arg Gly Val Asn Phe Pro Ser
115 120 125

Asn Gly Ala Val Met Gln Lys Lys Thr Lys Gly Trp Glu Pro Asn Thr
130 135 140

Glu Met Met Tyr Pro Ala Asp Gly Gly Leu Arg Gly Tyr Thr His Met
145 150 155 160

Ala Leu Lys Val Asp Gly Gly Gly His Leu Ser Cys Ser Phe Val Thr
165 170 175

Thr Tyr Arg Ser Lys Lys Thr Val Gly Asn Ile Lys Met Pro Gly Ile
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Gly Ser Val Asn Gly His Gln Phe Lys Cys Thr Gly Glu Gly Gly Gly
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Asn Pro Tyr Met Gly Thr Gln Thr Met Arg Ile Lys Val Ile Glu Gly
35 40 45

Gly Pro Leu Pro Phe Ala Phe Asp Ile Leu Ala Thr Ser Phe Met Tyr
50 55 60

Gly Ser Arg Thr Phe Ile Lys Tyr Pro Lys Gly Ile Pro Asp Phe Phe
65 70 75 80

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Lys Gln Ser Phe Pro Glu Gly Phe Thr Trp Glu Arg Val Thr Arg Tyr
85 90 95

Glu Asp Gly Gly Val Ile Thr Val Met Gln Asp Thr Ser Leu Glu Asp
100 105 110

Gly Cys Leu Val Tyr His Ala Gln Val Arg Gly Val Asn Phe Pro Ser
115 120 125

Asn Gly Ala Val Met Gln Lys Lys Thr Lys Gly Trp Glu Pro Asn Thr
130 135 140

Glu Met Met Tyr Pro Ala Asp Gly Gly Leu Arg Gly Tyr Thr His Met
145 150 155 160

Ala Leu Lys Val Asp Gly Gly Gly His Leu Ser Cys Ser Phe Val Thr
165 170 175

Thr Tyr Arg Ser Lys Lys Thr Val Gly Asn Ile Lys Met Pro Gly Ile
180 185 190

His Ala Val Asp His Arg Leu Glu Arg Leu Glu Glu Ser Asp Asn Glu
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Met Phe Val Val Gln Arg Glu His Ala Val Ala Lys Phe Ala Gly Leu
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Met Asn Ser Leu Ile Lys Glu Asn Met Arg Met Lys Val Val Leu Glu
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Gly Ser Val Asn Gly His Gln Phe Lys Cys Thr Gly Glu Gly Glu Gly
20 25 30

Asn Pro Tyr Met Gly Thr Gln Thr Met Arg Ile Lys Val Ile Glu Gly
35 40 45

Gly Pro Leu Pro Phe Ala Phe Asp Ile Leu Ala Thr Ser Phe Met Tyr
50 55 60

Gly Ser Arg Thr Phe Ile Lys Tyr Pro Lys Gly Ile Pro Asp Phe Phe
65 70 75 80

Lys Gln Ser Phe Pro Glu Gly Phe Thr Trp Glu Arg Val Thr Arg Tyr
85 90 95

Glu Asp Gly Gly Val Ile Thr Val Met Gln Asp Thr Ser Leu Glu Asp
100 105 110

Gly Cys Leu Val Tyr His Ala Gln Val Arg Gly Val Asn Phe Pro Ser
115 120 125

Asn Gly Ala Val Met Gln Lys Lys Thr Lys Gly Trp Glu Pro Asn Thr
130 135 140

Glu Met Met Tyr Pro Ala Asp Gly Gly Leu Arg Gly Tyr Thr His Met
145 150 155 160

Ala Leu Lys Val Asp Gly Gly Gly His Leu Ser Cys Ser Phe Val Thr
165 170 175

Thr Tyr Arg Ser Lys Lys Thr Val Gly Asn Ile Lys Met Pro Gly Ile
180 185 190

His Ala Val Asp His Arg Leu Glu Arg Leu Glu Glu Ser Asp Asn Glu
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Met Phe Val Val Gln Arg Glu His Ala Val Ala Lys Phe Cys Asp Leu
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Pro Ser Lys Leu Gly Arg Leu

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