

9869SG3613-seq1-000001
SEQUENCE LISTING

<110> Agency for Science, Technology and Research
Nanyang Technological University

<120> NANOCAPSULES CARRYING CHIKUNGUNYA-ASSOCIATED PEPTIDES

<130> 9869SG3613

<160> 20

<170> PatentIn version 3.5

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<211> 54
<212> DNA
<213> artificial

<220>
<223> E2EP3

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Ser Thr Lys Asp Asn Phe Asn Val Tyr Lys Ala Thr Arg Pro Tyr Leu

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1 5 10 15

Ala His

<210> 8
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Ser Ile Lys Asp His Phe Asn Val Tyr Lys Ala Thr Arg Pro Tyr Leu
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Ala His

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Trp Gly Asn Asn Glu Pro Tyr Lys Tyr Trp Pro Gln Leu Ser Thr Asn
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Gly Thr

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Arg Arg

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Arg Arg Lys

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Ser Thr Lys Asp Asn Phe Asn Val Tyr Lys
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Met Ala Ser Ile Ser Glu Lys Met Val Glu Ala Leu Asn Arg Gln Ile
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Phe Asp Ser Ile Gly Leu Lys Gly Phe Ser Asn Trp Met Arg Val Gln
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Trp Gln Glu Glu Leu Met His Ala Met Lys Met Phe Asp Phe Val Ser

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55

60

Glu Arg Gly Gly Arg Val Lys Leu Tyr Ala Val Glu Glu Pro Pro Ser
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Val Asn Val Thr Lys Arg Ile His Glu Leu Val Glu Met Ala Met Gln
100 105 110

Glu Lys Asp Phe Ala Thr Tyr Asn Phe Leu Gln Trp Tyr Val Ala Glu
115 120 125

Gln Val Glu Glu Glu Ala Ser Ala Leu Asp Ile Val Glu Lys Leu Arg
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Leu Ile Gly Glu Asp Ala Ala Ala Leu Leu Phe Leu Asp Lys Glu Leu
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Ser Leu Arg Gln Phe Thr Pro Pro Ala Glu Glu Glu Lys
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<223> Wild type ferritin

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Met Ala Ser Ile Ser Glu Lys Met Val Glu Ala Leu Asn Arg Gln Ile
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Asn Ala Glu Ile Tyr Ser Ala Tyr Leu Tyr Leu Ser Met Ala Ser Tyr
20 25 30

Phe Asp Ser Ile Gly Leu Lys Gly Phe Ser Asn Trp Met Arg Val Gln
35 40 45

Trp Gln Glu Glu Leu Met His Ala Met Lys Met Phe Asp Phe Val Ser
50 55 60

Glu Arg Gly Gly Arg Val Lys Leu Tyr Ala Val Glu Glu Pro Pro Ser
65 70 75 80

Glu Trp Asp Ser Pro Leu Ala Ala Phe Glu His Val Tyr Glu His Glu
85 90 95

Val Asn Val Thr Lys Arg Ile His Glu Leu Val Glu Met Ala Met Gln
100 105 110

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Glu Lys Asp Phe Ala Thr Tyr Asn Phe Leu Gln Trp Tyr Val Ala Glu
 115 120 125

Gln Val Glu Glu Glu Ala Ser Ala Leu Asp Ile Val Glu Lys Leu Arg
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Leu Ile Gly Glu Asp Lys Arg Ala Leu Leu Phe Leu Asp Lys Glu Leu
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Ser Leu Arg Gln Phe Thr Pro Pro Ala Glu Glu Glu Lys
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<400> 19

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

Asn Arg Gln Ile Asn Ala Glu Ile Tyr Ser Ala Tyr Leu Tyr Leu Ser
35 40 45

Met Ala Ser Tyr Phe Asp Ser Ile Gly Leu Lys Gly Phe Ser Asn Trp
50 55 60

Met Arg Val Gln Trp Gln Glu Glu Leu Met His Ala Met Lys Met Phe
65 70 75 80

Asp Phe Val Ser Glu Arg Gly Gly Arg Val Lys Leu Tyr Ala Val Glu
85 90 95

Glu Pro Pro Ser Glu Trp Asp Ser Pro Leu Ala Ala Phe Glu His Val
100 105 110

Tyr Glu His Glu Val Asn Val Thr Lys Arg Ile His Glu Leu Val Glu
115 120 125

Met Ala Met Gln Glu Lys Asp Phe Ala Thr Tyr Asn Phe Leu Gln Trp
130 135 140

Tyr Val Ala Glu Gln Val Glu Glu Glu Ala Ser Ala Leu Asp Ile Val
145 150 155 160

Glu Lys Leu Arg Leu Ile Gly Glu Asp Lys Arg Ala Leu Leu Phe Leu
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Asp Lys Glu Leu Ser Leu Arg Gln Phe Thr Pro Pro Ala Glu Glu Glu

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Lys

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 20 25 30

Tyr Ser Ala Tyr Leu Tyr Leu Ser Met Ala Ser Tyr Phe Asp Ser Ile
 35 40 45

Gly Leu Lys Gly Phe Ser Asn Trp Met Arg Val Gln Trp Gln Glu Glu
 50 55 60

Leu Met His Ala Met Lys Met Phe Asp Phe Val Ser Glu Arg Gly Gly
 65 70 75 80

Arg Val Lys Leu Tyr Ala Val Glu Glu Pro Pro Ser Glu Trp Asp Ser
 85 90 95

Pro Leu Ala Ala Phe Glu His Val Tyr Glu His Glu Val Asn Val Thr
 100 105 110

Lys Arg Ile His Glu Leu Val Glu Met Ala Met Gln Glu Lys Asp Phe
 115 120 125

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Ala Thr Tyr Asn Phe Leu Gln Trp Tyr Val Ala Glu Gln Val Glu Glu
 130 135 140

Glu Ala Ser Ala Leu Asp Ile Val Glu Lys Leu Arg Leu Ile Gly Glu
 145 150 155 160

Asp Lys Arg Ala Leu Leu Phe Leu Asp Lys Glu Leu Ser Leu Arg Gln
 165 170 175

Phe Thr Pro Pro Ala Glu Glu Glu Lys
 180 185