

SEQUENCE LISTING

<110> Bondwell Technologies Inc.
 <120> FUNCTIONALIZED UBX PROTEIN MATERIALS FOR ENHANCED PURIFICATION OF ANTIBODIES
 <130> 1043444-1187897
 <150> US 62/828,142
 <151> 2019-04-02
 <160> 25
 <170> PatentIn version 3.5
 <210> 1
 <211> 60
 <212> PRT
 <213> Artificial sequence
 <220>
 <223> Synthetic construct
 <400> 1

His Met Val Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr
 1 5 10 15

Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Ala Phe
 20 25 30

Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala
 35 40 45

Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys
 50 55 60

<210> 2
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 <213> Artificial sequence
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 <400> 2

Ala Gln His Asp Glu Ala Gln Gln Asn Ala Phe Tyr Gln Val Leu Asn
 1 5 10 15

Met Pro Asn Leu Asn Ala Asp Gln Arg Asn Gly Phe Ile Gln Ser Leu
 20 25 30

Lys Asp Asp Pro Ser Gln Ser Ala Asn Val Leu Gly Glu Ala Gln Lys
 35 40 45

Leu Asn Asp Ser Gln Ala Pro Lys
 50 55

<210> 3
 <211> 58
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Synthetic construct

<400> 3

Ala Asp Asn Asn Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile
 1 5 10 15

Leu Asn Met Pro Asn Leu Asn Glu Glu Gln Arg Asn Gly Phe Ile Gln
 20 25 30

Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ser Glu Ala
 35 40 45

Lys Lys Leu Asn Glu Ser Gln Ala Pro Lys
 50 55

<210> 4
 <211> 58
 <212> PRT
 <213> Artificial sequence

<220>
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<400> 4

Ala Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile
 1 5 10 15

Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Gly Phe Ile Gln
 20 25 30

Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala
 35 40 45

Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys
 50 55

<210> 5
 <211> 58
 <212> PRT
 <213> Artificial sequence

<220>
 <223> synthetic construct

<400> 5

Ala Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile
 1 5 10 15

Leu His Leu Pro Asn Leu Thr Glu Glu Gln Arg Asn Gly Phe Ile Gln
 20 25 30

Ser Leu Lys Asp Asp Pro Ser Val Ser Lys Glu Ile Leu Ala Glu Ala
 35 40 45

Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys
 50 55

<210> 6
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 <212> PRT
 <213> Artificial sequence

<220>
 <223> Synthetic construct

<400> 6

Thr Tyr Lys Leu Ile Leu Asn Gly Lys Thr Leu Lys Gly Glu Thr Thr
 1 5 10 15

Thr Glu Ala Val Asp Ala Ala Thr Ala Glu Lys Val Phe Lys Gln Tyr
 20 25 30

Ala Asn Asp Asn Gly Val Asp Gly Glu Trp Thr Tyr Asp Asp Ala Thr
 35 40 45

Lys Thr Phe Thr Val Thr Glu
 50 55

<210> 7
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 <212> PRT
 <213> Artificial sequence

<220>
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<400> 7

Thr Tyr Lys Leu Val Ile Asn Gly Lys Thr Leu Lys Gly Glu Thr Thr
 1 5 10 15

Thr Glu Ala Val Asp Ala Ala Thr Ala Glu Lys Val Phe Lys Gln Tyr
 20 25 30

Ala Asn Asp Asn Gly Val Asp Gly Glu Trp Thr Tyr Asp Asp Ala Thr
 35 40 45

Lys Thr Phe Thr Val Thr Glu
 50 55

<210> 8
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<220>
 <223> Synthetic construct

<400> 8

Thr Tyr Lys Leu Val Ile Asn Gly Lys Thr Leu Lys Gly Glu Thr Thr
 1 5 10 15

Thr Lys Ala Val Asp Ala Glu Thr Ala Glu Lys Ala Phe Lys Gln Tyr
 20 25 30

Ala Asn Asp Asn Gly Val Asp Gly Val Trp Thr Tyr Asp Asp Ala Thr
35 40 45

Lys Thr Phe Thr Val Thr Glu
50 55

<210> 9

<211> 58

<212> PRT

<213> Artificial sequence

 $\langle 220 \rangle$

<223> Synthetic construct

<400> 9

Val Thr Ile Lys Ala Asn Leu Ile Phe Ala Asp Gly Ser Thr Gln Asn
1 5 10 15

Ala Glu Phe Lys Gly Thr Phe Ala Lys Ala Val Ser Asp Ala Tyr Ala
20 25 30

Tyr Ala Asp Ala Leu Lys Lys Asp Asn Gly Glu Tyr Thr Val Asp Val
35 40 45

Ala Asp Lys Gly Leu Thr Leu Asn Ile Lys
50 55

$\langle 210 \rangle$ 10

<211> 59

<212> PRT

<213> Artificial sequence

 $\langle 220 \rangle$

<223> Synthetic construct

<400> 10

Val Thr Ile Lys Val Asn Leu Ile Phe Ala Asp Gly Lys Thr Gln Thr
1 5 10 15

Ala Glu Phe Lys Gly Thr Phe Glu Glu Ala Thr Ala Lys Ala Tyr Ala
20 25 30

Tyr Ala Asp Leu Leu Ala Lys Glu Asn Gly Glu Tyr Thr Ala Asp Leu
35 40 45

Glu Asp Gly Gly Asn Thr Ile Asn Ile Lys Phe
 50 55

<210> 11
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<220>
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<400> 11

Val Thr Ile Lys Val Asn Leu Ile Phe Ala Asp Gly Lys Ile Gln Thr
 1 5 10 15

Ala Glu Phe Lys Gly Thr Phe Glu Glu Ala Thr Ala Lys Ala Tyr Ala
 20 25 30

Tyr Ala Asn Leu Leu Ala Lys Glu Asn Gly Glu Tyr Thr Ala Asp Leu
 35 40 45

Glu Asp Gly Gly Asn Thr Ile Asn Ile Lys Phe Ala Gly
 50 55 60

<210> 12
 <211> 61
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Synthetic construct

<400> 12

Val Thr Ile Lys Val Asn Leu Ile Phe Ala Asp Gly Lys Thr Gln Thr
 1 5 10 15

Ala Glu Phe Lys Gly Thr Phe Glu Glu Ala Thr Ala Glu Ala Tyr Arg
 20 25 30

Tyr Ala Asp Leu Leu Ala Lys Val Asn Gly Glu Tyr Thr Ala Asp Leu
 35 40 45

Glu Asp Gly Gly Tyr Thr Ile Asn Ile Lys Phe Ala Gly
 50 55 60

<210> 13
 <211> 56
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Synthetic construct

<400> 13

Ala Gln His Asp Glu Ala Gln Gln Asn Ala Phe Tyr Gln Val Leu Asn
 1 5 10 15

Met Pro Asn Leu Asn Ala Asp Gln Arg Asn Gly Phe Ile Gln Ser Leu
 20 25 30

Lys Asp Asp Pro Ser Gln Ser Ala Asn Val Leu Gly Glu Ala Gln Lys
 35 40 45

Leu Asn Asp Ser Gln Ala Pro Lys
 50 55

<210> 14
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 <212> PRT
 <213> Artificial sequence

<220>
 <223> Synthetic construct

<400> 14

Ala Asp Ala Gln Gln Asn Asn Phe Asn Lys Asp Gln Gln Ser Ala Phe
 1 5 10 15

Tyr Glu Ile Leu Asn Met Pro Asn Leu Asn Glu Ala Gln Arg Asn Gly
 20 25 30

Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Thr Asn Val Leu
 35 40 45

Gly Glu Ala Lys Lys Leu Asn Glu Ser Gln Ala Pro Lys
 50 55 60

<210> 15
 <211> 58
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Synthetic construct

<400> 15

Ala Asp Asn Asn Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile
 1 5 10 15

Leu Asn Met Pro Asn Leu Asn Glu Glu Gln Arg Asn Gly Phe Ile Gln
 20 25 30

Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ser Glu Ala
 35 40 45

Lys Lys Leu Asn Glu Ser Gln Ala Pro Lys
 50 55

<210> 16
 <211> 58
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Synthetic construct

<400> 16

Ala Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile
 1 5 10 15

Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Gly Phe Ile Gln
 20 25 30

Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu Ala Glu Ala
 35 40 45

Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys
 50 55

<210> 17
 <211> 58
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Synthetic construct

<400> 17

Ala Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile
 1 5 10 15

Leu His Leu Pro Asn Leu Thr Glu Glu Gln Arg Asn Gly Phe Ile Gln
 20 25 30

Ser Leu Lys Asp Asp Pro Ser Val Ser Lys Glu Ile Leu Ala Glu Ala
 35 40 45

Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys
 50 55

<210> 18
 <211> 55
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Synthetic construct

<400> 18

Thr Tyr Lys Leu Ile Leu Asn Gly Lys Thr Leu Lys Gly Glu Thr Thr
 1 5 10 15

Thr Glu Ala Val Asp Ala Ala Thr Ala Glu Lys Val Phe Lys Gln Tyr
 20 25 30

Ala Asn Asp Asn Gly Val Asp Gly Glu Trp Thr Tyr Asp Asp Ala Thr
 35 40 45

Lys Thr Phe Thr Val Thr Glu
 50 55

<210> 19
 <211> 55

<212> PRT
 <213> Artificial sequence

<220>
 <223> Synthetic construct

<400> 19

Thr Tyr Lys Leu Val Ile Asn Gly Lys Thr Leu Lys Gly Glu Thr Thr
 1 5 10 15

Thr Lys Ala Val Asp Ala Glu Thr Ala Glu Lys Ala Phe Lys Gln Tyr
 20 25 30

Ala Asn Asp Asn Gly Val Asp Gly Val Trp Thr Tyr Asp Asp Ala Thr
 35 40 45

Lys Thr Phe Thr Val Thr Glu
 50 55

<210> 20
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 <212> PRT
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<220>
 <223> Synthetic construct

<400> 20

Leu Arg Arg Arg Gly Arg Gln Thr Tyr Thr Arg Tyr Gln Thr Leu Glu
 1 5 10 15

Leu Glu Lys Glu Phe His Thr Asn His Tyr Leu Thr Arg Arg Arg Arg
 20 25 30

Ile Glu Met Ala His Ala Leu Cys Leu Thr Glu Arg Gln Ile Lys Ile
 35 40 45

Trp Phe Gln Asn Arg Arg Met Lys Leu Lys Lys Glu Ile
 50 55 60

<210> 21
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<220>

<223> Synthetic construct

<400> 21

Met Asn Ser Tyr Phe Glu Gln Ala
1 5

<210> 22

<211> 19

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic construct

<400> 22

Val Arg Pro Ser Ala Cys Thr Pro Asp Ser Arg Val Gly Gly Tyr Leu
1 5 10 15

Asp Thr Ser

<210> 23

<211> 8

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic construct

<400> 23

Phe Tyr Pro Trp Met Ala Ile Ala
1 5

<210> 24

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic construct

<400> 24

Ser Gly Ser Gly
1

<210> 25
<211> 4
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic construct

<400> 25

Gly Ser Gly Ser

1