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<110> PHARMABCINE INC.

<120> MODIFIED ANTIBODY AND METHOD FOR MANUFACTURING SAME

<130> 4240-666

<150> PCT/KR2021/010984

<151> 2021-08-19

<150> KR10-2020-0103945

<151> 2020-08-19

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<170> PatentIn version 3.5

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Gly Phe Thr Phe Ser Ser Tyr Ser

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Ile Asp Thr Gly Gly Gly Ala Lys

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Gly Phe Thr Phe Asp Asp Cys Ala

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Ile Ser Gly Asn Ser Lys Asn Val

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Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

35 40 45

Ser Ser Ile Ser Ala Ser Asp Gly Ala Thr Tyr Tyr Ala Asp Ser Val

50 55 60

Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Ser 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 Thr Leu Ala Gly Tyr Ser Gly Pro Met Gly Gly Met Asp Val

100 105 110

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser

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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Arg Asp Ile Ser Asn Tyr

20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Ser Leu Ile

35 40 45

Tyr Gly Ala Ser Asn Leu Gln Ser Gly Val Ser Ser Gln Phe Ser Gly

50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn Ser Leu Gln Pro

65 70 75 80

Glu Asp Ser Ala Thr Tyr Tyr Cys Gln Gln Tyr Tyr Ser Tyr Pro Leu

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Thr Phe Gly Gly Gly Thr Lys Val Asp Ile Lys Arg

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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr

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25

30

Ser Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

35

40

45

Ser Ser Ile Ser Ala Ser Asp Gly Ala Thr Tyr Tyr Ala Asp Ser Val

50 55 60

Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Ser 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 Thr Leu Ala Gly Tyr Ser Gly Pro Met Gly Gly Met Asp Val

100 105 110

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser

115 120

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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr

20 25 30

Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

35 40 45

Ser Ser Ile Ser Ala Ser Asp Gly Ala Thr Tyr Tyr Ala Asp Ser Val

50 55 60

Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Ser 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 Thr Leu Ala Gly Tyr Ser Gly Pro Met Gly Gly Met Asp Val

100 105 110

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser

115 120

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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly

1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Arg Asp Ile Ser Asn Tyr

20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Ser Leu Ile

35 40 45

Tyr Gly Ala Ser Asn Leu Gln Ser Gly Val Ser Ser Gln Phe Ser Gly

50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro

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Glu Asp Ser Ala Thr Tyr Tyr Cys Gln Gln Tyr Tyr Ser Tyr Pro Leu

85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Asp Ile Lys Arg

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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr

20 25 30

Ser Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

35 40 45

Ser Ser Ile Ser Ala Ser Asp Gly Ala Thr Tyr Tyr Ala Asp Ser Val

50 55 60

Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Ser 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 Thr Leu Ala Gly Tyr Ser Gly Pro Met Gly Gly Met Asp Val

100 105 110

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser

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gcagactccg tgaggggccc gttcaccatc tccagagaca attccaggag cacactgtat 240

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<400> 44

Ala Lys Ile Leu Val Gly Tyr Ser Gly Pro Met Gly Gly Met Asp Val

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<211> 16

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Ala Lys Ser Leu Ala Ser Tyr Ser Gly Pro Met Gly Gly Met Asp Val

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<210> 46

<211> 123

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Gln Val Gln Leu Val Glu Ser Gly Gly Gly Thr Val Lys Pro Gly Gly

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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr

20 25 30

Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

35 40 45

Ser Ser Ile Ser Ala Ser Asp Gly Ala Thr Tyr Tyr Ala Asp Ser Val

50 55 60

Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Ser 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 Thr Leu Ala Gly Tyr Ser Gly Pro Met Gly Gly Met Asp Val

100 105 110

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser

115 120

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gcagactccg tgaggggccc gttcaccatc tccagagaca attccaggag cacactgtat 240

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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr

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Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

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Ser Ser Ile Ser Ala Ser Asp Gly Ala Thr Tyr Tyr Ala Asp Ser Val

50

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Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Ser Thr Leu Tyr

65

70

75

80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Ser Tyr Tyr Cys

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90

95

Ala Lys Thr Leu Ala Gly Tyr Ser Gly Pro Met Gly Gly Met Asp Val

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110

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser

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gcagactccg tgaggggccg gttcaccatc tccagagaca attccaggag cacactgtat 240

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gcgggatata gtggccaat ggggtggcatg gacgtctggg gccaaggac cacggtcacc 360

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Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Arg Asp Ile Ser Asn Tyr

20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Ser Leu Ile

35 40 45

Tyr Gly Ala Ser Asn Leu Gln Ser Gly Val Ser Ser Arg Phe Ser Gly

50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn Ser Leu Gln Pro

65 70 75 80

Glu Asp Ser Ala Thr Tyr Tyr Cys Gln Gln Tyr Tyr Ser Tyr Pro Leu

85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Asp Ile Lys Arg

100 105

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gggaaagccc ctaagtcctt gatctatgga gcatccaatt taaaagtgg ggtctcatca 180

cggttcagcg gcagtggatc cgggacagat ttcaccctca ccatcaacag cctgcagcct 240

gaagattctg caactatta ctgtcaacag tactatagtt acccgctcac tttggcgga 300

gggaccaagg tggatatcaa acgt 324