

SEQUENCE LISTING

<110> National Cancer Center
RIN Institute Inc.

<120> ANTIBODY DRUG CONJUGATE

<130> IBPF21-505W0

<150> JP2020-60968

<151> 2020-03-30

<160> 18

<170> PatentIn version 3.5

<210> 1

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Humanized1084 HCDR1

<400> 1

Asn	Tyr	Asn	Val	His
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Var	Ile	Trp	Thr	Asp	Gly	Lys	Thr	Asp	Tyr	Ser	Thr	Ser	Leu	Lys	Thr
1				5					10					15	

<210> 3

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<400> 3

Asp Trp Asp Thr Gly Phe Asp Tyr
1 5

<210> 4
<211> 116
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<213> Artificial Sequence

<220>
<223> Humanized1084 heavy chain variable region

<400> 4

Gln Val Gln Leu Lys Glu Ser Gly Pro Ala Leu Val Lys Pro Thr Gln
1 5 10 15

Thr Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Thr Asn Tyr
20 25 30

Asn Val His Trp Ile Arg Gln Pro Pro Gly Lys Ala Leu Glu Trp Leu
35 40 45

Gly Val Ile Trp Thr Asp Gly Lys Thr Asp Tyr Ser Thr Ser Leu Lys
50 55 60

Thr Arg Leu Thr Ile Ser Arg Asp Thr Ser Lys Asn Gln Val Val Leu
65 70 75 80

Thr Met Thr Asn Met Asp Pro Val Asp Thr Ala Thr Tyr Tyr Cys Ala
85 90 95

Arg Asp Trp Asp Thr Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110

Thr Val Ser Ser
115

<210> 5
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<400> 5

Arg Ala Ser Gln Asn Ile Asn Asn Ile Leu Ala
1 5 10

<210> 6

<211> 7

<212> PRT

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<400> 6

Tyr Thr Ser Ser Leu Gln Ser
1 5

<210> 7

<211> 8

<212> PRT

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<223> Humanized1084 LCDR3

<400> 7

Gln Gln Ala Tyr Thr Pro Tyr Ala
1 5

<210> 8

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<223> Humanized1084 light chain variable region

<400> 8

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 Gln Asn Ile Asn Asn Ile
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

His Tyr Thr Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Tyr Thr Pro Tyr Ala
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 9
<211> 5
<212> PRT
<213> Rattus norvegicus

<220>
<223> 1084 HCDR1

<400> 9

Asn Tyr Asn Val His
1 5

<210> 10
<211> 16
<212> PRT
<213> Rattus norvegicus

<220>
<223> 1084 HCDR2

<400> 10

Var Ile Trp Thr Asp Gly Lys Thr Asp Tyr Asn Ser Thr Leu Gln Ser
1 5 10 15

<210> 11
<211> 8
<212> PRT
<213> Rattus norvegicus

<220>
<223> 1084 HCDR3

<400> 11

Asp Trp Asp Thr Gly Phe Asp Tyr
1 5

<210> 12

<211> 116

<212> PRT

<213> Rattus norvegicus

<220>

<223> 1084 heavy chain variable region

<400> 12

Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val Gln Pro Ser Gln
1 5 10 15

Thr Leu Ser Leu Thr Cys Ile Val Ser Gly Phe Ser Leu Thr Asn Tyr
20 25 30

Asn Val His Trp Val Arg Gln Pro Ala Gly Ala Gly Leu Glu Trp Met
35 40 45

Gly Val Ile Trp Thr Asp Gly Lys Thr Asp Tyr Asn Ser Thr Leu Gln
50 55 60

Ser Arg Leu Ser Ile Ser Arg Asp Thr Ser Lys Ser Gln Val Phe Leu
65 70 75 80

Lys Met Asn Ser Leu Gln Ala Glu Asp Ile Ala Thr Tyr Tyr Cys Ala
85 90 95

Arg Asp Trp Asp Thr Gly Phe Asp Tyr Trp Gly Gln Gly Val Met Val
100 105 110

Thr Val Ser Ser
115

<210> 13

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<212> PRT

<213> Rattus norvegicus

<220>

<223> 1084 LCDR1

<400> 13

Arg Ala Ser Glu Asn Ile Asn Asn Ile Leu Ala
1 5 10

<210> 14

<211> 7

<212> PRT

<213> Rattus norvegicus

<220>

<223> 1084 LCDR2

<400> 14

Tyr Thr Ser Asn Leu Gln Ser
1 5

<210> 15

<211> 8

<212> PRT

<213> Rattus norvegicus

<220>

<223> 1084 LCDR3

<400> 15

Gln Gln Ala Tyr Thr Pro Tyr Ala
1 5

<210> 16

<211> 106

<212> PRT

<213> Rattus norvegicus

<220>

<223> 1084 light chain variable region

<400> 16

Asp Ile Lys Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Glu Arg Val Thr Ile Ser Cys Arg Ala Ser Glu Asn Ile Asn Asn Ile
20 25 30

Leu Ala Trp Tyr Gln Lys Lys Glu Asp Gly Ser Val Lys Leu Leu Ile
35 40 45

His Tyr Thr Ser Asn Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Lys Asp Tyr Ser Leu Thr Ile Ser Gly Leu Glu Ser
65 70 75 80

Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Ala Tyr Thr Pro Tyr Ala
85 90 95

Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
100 105

<210> 17
<211> 465
<212> PRT
<213> Artificial Sequence

<220>
<223> Humanized1084 heavy chain

<400> 17

Met Asp Ile Leu Cys Ser Thr Leu Leu Leu Leu Thr Val Pro Ser Trp
1 5 10 15

Val Leu Ser Gln Val Gln Leu Lys Glu Ser Gly Pro Ala Leu Val Lys
20 25 30

Pro Thr Gln Thr Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu
35 40 45

Thr Asn Tyr Asn Val His Trp Ile Arg Gln Pro Pro Gly Lys Ala Leu
50 55 60

Glu Trp Leu Gly Val Ile Trp Thr Asp Gly Lys Thr Asp Tyr Ser Thr
65 70 75 80

Ser Leu Lys Thr Arg Leu Thr Ile Ser Arg Asp Thr Ser Lys Asn Gln
85 90 95

Val Val Leu Thr Met Thr Asn Met Asp Pro Val Asp Thr Ala Thr Tyr
100 105 110

Tyr Cys Ala Arg Asp Trp Asp Thr Gly Phe Asp Tyr Trp Gly Gln Gly
115 120 125

Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
130 135 140

Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu
145 150 155 160

Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
165 170 175

Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
180 185 190

Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser
195 200 205

Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro
210 215 220

Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys
225 230 235 240

Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro
245 250 255

Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser
260 265 270

Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp
275 280 285

Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn
290 295 300

Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val
305 310 315 320

Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu
325 330 335

Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys
340 345 350

Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
355 360 365

Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr
370 375 380

Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu
385 390 395 400

Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu
405 410 415

Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys
420 425 430

Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu
435 440 445

Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
450 455 460

Lys
465

<210> 18
<211> 235
<212> PRT
<213> Artificial Sequence

<220>
<223> Humanized1084 light chain

<400> 18

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Asp Ile Gln Met Thr Gln Ser Pro Ser Ser
20 25 30

Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser
35 40 45

Gln Asn Ile Asn Asn Ile Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys
50 55 60

Ala Pro Lys Leu Leu Ile His Tyr Thr Ser Ser Leu Gln Ser Gly Val
65 70 75 80

Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
85 90 95

Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
100 105 110

Ala Tyr Thr Pro Tyr Ala Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
115 120 125

Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
130 135 140

Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
145 150 155 160

Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
165 170 175

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
180 185 190

Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
195 200 205

Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
210 215 220

Pro	Val	Thr	Lys	Ser	Phe	Asn	Arg	Gly	Glu	Cys
225					230					235