LISTAGEM DE SEQU&#65533;NCIAS

<110> FIOCRUZ FUNDA&#65533;&#65533;O OSWALDO CRUZ

<120> "POLIPEPT&#65533;DEO, CASSETE DE EXPRESS&#65533;O, VETOR DE EXPRESS&#65533;O, C&#65533;LULA HOSPEDEIRA, KIT PARA TRIAGEM IMUNOL&#65533;GICA DE HCV E/OU DIAGN&#65533;STICO DE HEPATITE C, COMPOSI&#65533;&#65533;O, USO DE PELO MENOS UM POLIPEPT&#65533;DEO, E, M&#65533;TODOS PARA PRODUZIR UM POLIPEPT&#65533;DEO, PARA TRIAGEM IMUNOL&#65533;GICA DE HCV E PARA O DIAGN&#65533;STICO DE HEPATITE C"

<130> Caso 163

<160> 16

<170> PatentIn version 3.5

<210> 1
<211> 366
<212> PRT
<213> Sequ&#65533;ncia Artificial

<220>
<223> Poliant&#65533;geno composto das regi&#65533;es NC e NS4 de HCV gen&#65533;tipo 3a

<400> 1

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


Arg Asn Thr Ile Arg Arg Pro Pro Asp Val Lys Phe Pro Gly Gly Gly
            20                  25                  30


Gln Ile Val Gly Gly Val Tyr Val Leu Pro Arg Arg Gly Pro Arg Leu
        35                  40                  45


Gly Val Arg Ala Thr Arg Lys Thr Ser Glu Arg Ser Gln Pro Arg Gly
    50                  55                  60


Arg Arg Gln Pro Ile Pro Lys Ala Arg Arg Ser Glu Gly Arg Ser Trp
65                  70                  75                  80


Ala Gln Pro Gly Tyr Pro Trp Pro Leu Tyr Gly Asn Glu Gly Cys Gly
                85                  90                  95


Trp Ala Gly Trp Leu Leu Ser Pro Arg Gly Ser Arg Pro Ser Trp Gly
            100                 105                 110


Pro Asn Asp Pro Arg Arg Arg Ser Arg Asn Leu Lys Pro Ala Leu Val
        115                 120                 125


Pro Asp Lys Glu Val Leu Tyr Gln Gln Tyr Asp Glu Met Glu Glu Cys
    130                 135                 140


Ser Gln Ala Ala Pro Tyr Ile Glu Gln Ala Gln Val Ile Ala His Gln
145                 150                 155                 160


Phe Lys Glu Lys Ser Leu Met Ala Phe Thr Ala Ser Val Thr Ser Pro
                165                 170                 175
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Leu Thr Thr Asn Gln Thr Met Phe Phe Asn Ile Leu Gly Gly Trp Val
            180                 185                 190


Ala Thr His Leu Ala Gly Pro Gln Gly Ser Ser Ala Phe Val Val Ser
        195                 200                 205


Gly Leu Ala Gly Ala Ala Ile Gly Gly Ile Gly Leu Gly Lys Val Leu
    210                 215                 220


Leu Asp Ile Leu Ala Gly Tyr Gly Ala Gly Val Ser Gly Ala Leu Val
225                 230                 235                 240


Ala Phe Lys Phe Ala Ser Arg Gly Asn His Val Ser Pro Thr His Tyr
                245                 250                 255


Val Pro Glu Ser Asp Ala Lys Ala Thr Cys Gln Thr His Arg Pro His
            260                 265                 270


Pro Asp Ala Glu Leu Val Asp Ala Asn Leu Leu Trp Gln Glu Met Gly
        275                 280                 285


Ser Asn Ile Thr Arg Val Glu Ser Glu Thr Lys Val Val Ile Leu Asp
    290                 295                 300


Ser Phe Glu Pro Leu Arg Ala Glu Thr Asp Asp Thr Glu Leu Ser Val
305                 310                 315                 320


Ala Ala Glu Cys Phe Lys Lys Pro Pro Lys Tyr Pro Pro Ala Leu Pro
                325                 330                 335


Ile Trp Ala Arg Pro Asp Tyr Asn Pro Pro Leu Leu Asp Arg Trp Lys
            340                 345                 350


Ala Pro Asp Tyr Val Pro Pro Thr Val His Gly Ala Asn Ser
        355                 360                 365


<210>  2
<211>  1112
<212>  DNA
<213>  Sequ�ncia Artificial

<220>
<223>  Poliant�geno composto das regi�es NC e NS4 de HCV gen�tipo 3a

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gccgtccgcc ggatgtgaag ttcccgggtg gtggtcagat tgtcggcggt gtttatgtcc      120

tgccgcgtcg cggtccgcgt ctgggtgtgc gcgcgacccg taaaacgagt gaacgttccc      180

agccgcgtgg tcgtcgccaa ccgattccga aggcgcgtcg cagtgaaggt cgttcctggg      240

cacagccggg ttatccgtgg ccgctgtacg gtaacgaagg ctgcggttgg gcaggttggc      300
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tgctgtcacc gcgtggttca cgtccgtcgt ggggtccgaa cgatccgcgt cgccgttcgc 360

gcaatctgaa accggcgctg gtcccggata aggaagtgct gtatcagcaa tacgacgaaa 420

tggaagaatg tagccaggcg gccccgtaca ttgaacaggc gcaagttatc gcccatcaat 480

ttaaagaaaa gtctctgatg gcgttcaccg ccagcgtcac gtctccgctg accacgaacc 540

agaccatgtt tttcaatatt ctgggcggtt gggtggcaac gcacctggct ggtccgcaag 600

gcagctctgc atttgttgtt agtggtctgg ctggcgcagc tattggcggt atcggcctgg 660

gtaaagttct gctggatatc ctggcaggtt atggtgcagg tgttagcggt gcactggtcg 720

cttttaaatt cgcctcacgc ggtaaccatg tgtcgccgac ccactacgtt ccggaaagcg 780

acgcaaaggc tacctgccag acgcatcgtc cgcacccgga tgcagaactg gtggacgcta 840

acctgctgtg gcgccaggaa atgggcagca atattacccg tgttgaatct gaaacgaaag 900

tcgtgatcct ggatagtttt gaaccgctgc gtgccgaaac cgatgacacg gaactgtccg 960

tggcggccga atgtttcaaa aagccgccga aatatccgcc ggcactgccg atctgggcac 1020

gtccggatta caatccgccg ctgctggatc gttggaaagc accggactat gtgccgccga 1080

ccgttcatgg tgcgaattcc tgataaaagc tt 1112

<210> 3
<211> 261
<212> PRT
<213> Sequ&#65533;ncia Artificial

<220>
<223> Poliant&#65533;geno composto das regi&#65533;es NC e NS4 de HCV gen&#65533;tipo 1b

<400> 3

Met Ala Gly Ser Ser Thr Asn Pro Lys Pro Gln Arg Lys Ile Lys Arg
1 5 10 15

Asn Thr Asn Arg Arg Pro Gln Asp Val Lys Phe Pro Gly Gly Gly Gln
20 25 30

Ile Val Gly Gly Val Tyr Leu Leu Pro Arg Arg Gly Pro Arg Leu Gly
35 40 45

Val Arg Ala Thr Arg Lys Thr Ser Glu Arg Pro Gln Pro Arg Gly Arg
50 55 60

Arg Gln Pro Ile Pro Lys Ala Arg Gln Pro Glu Gly Arg Ala Trp Ala
65 70 75 80

Gln Pro Gly Tyr Pro Trp Pro Leu Tyr Gly Asn Glu Gly Leu Gly Trp
85 90 95

Ala Gly Trp Leu Leu Ser Pro Arg Gly Ser Arg Pro Ser Trp Gly Pro
100 105 110

Thr Asp Pro Arg Arg Arg Ser Arg Asn Leu Arg Pro Ala Val Ile Pro
115 120 125

Asp Arg Glu Val Leu Tyr Gln Glu Phe Asp Glu Met Glu Glu Cys Ala
130 135 140

Ser His Leu Pro Tyr Ile Glu Gln Gly Met Gln Leu Ala Glu Gln Phe
145 150 155 160

Lys Gln Lys Ser Leu Met Ala Phe Thr Ala Ser Ile Thr Ser Pro Leu
165 170 175

Thr Thr Gln Tyr Thr Leu Leu Phe Asn Ile Leu Gly Gly Trp Val Ala
180 185 190

Ala Gln Leu Ala Pro Pro Ser Ala Ala Ser Ala Phe Val Gly Ala Gly
195 200 205

Ile Ala Gly Ala Ala Val Gly Ser Ile Gly Leu Gly Lys Val Leu Val
210 215 220

Asp Ile Leu Ala Gly Tyr Gly Ala Gly Val Ala Gly Ala Leu Val Ala
225 230 235 240

Phe Lys Phe Ala Ser Arg Gly Asn His Val Ser Pro Thr His Tyr Val
245 250 255

Pro Glu Ser Asp Ala
260

<210> 4
<211> 798
<212> DNA
<213> Sequ&#65533;ncia Artificial

<220>
<223> Poliant&#65533;geno composto das regi&#65533;es NC e NS4 de HCV gen&#65533;tipo 1b

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gtcgtccgca agatgtcaag tttccgggtg gcggtcaaat cgtgggcggt gtttatctgc 120

tgccgcgtcg cggtccgcgt ctgggtgtgc gcgcgacccg taaaacgagt gaacgtccgc 180

agccgcgtgg tcgtcgccaa ccgattccga aggcacgtca gccggaaggt cgtgcatggg 240

ctcaaccggg ctatccgtgg ccgctgtacg gtaacgaagg cctgggttgg gcaggttggc 300

tgctgtcacc gcgtggtagc cgtccgtctt ggggtccgac cgatccgcgt cgccgttcgc 360

gtaatctgcg tccggccgtt attccggatc gtgaagtcct gtatcaggaa tttgacgaaa 420

tggaagaatg cgccagccat ctgccgtaca tcgaacaggg catgcaactg gcagaacagt 480

ttaaacaaaa gtctctgatg gcgttcaccg ccagtattac gtccccgctg accacgcagt 540

acaccctgct gtttaacatc ctgggcggtt gggttgcagc acaactggca ccgccgtcag 600

cagcttcggc attcgttggt gcaggtattg ctggtgcagc agtcggctct atcggtctgg 660

gtaaagtcct ggtggatatt ctggcaggtt atggtgcagg tgtcgcaggt gccctggtgg 720

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acgcataaaa gcttcatg 798

<210> 5
<211> 480
<212> PRT
<213> Sequ&#65533;ncia Artificial

<220>
<223> Poliant&#65533;geno composto das regi&#65533;es NS3 e NS5 de HCV gen&#65533;tipo 1b

<400> 5

Met Ala Gly Ser Gly Pro Lys Gly Pro Ile Thr Gln Met Tyr Thr Asn
1 5 10 15

Val Asp Gln Asp Leu Val Gly Trp Pro Ala Pro Pro Gly Ala Arg Ser
20 25 30

Met Thr Pro Cys Thr Cys Gly Ser Ser Asp Leu Tyr Leu Val Thr Arg
35 40 45

His Ala Asp Val Ile Pro Val Arg Arg Arg Gly Asp Ser Arg Gly Ser
50 55 60

Leu Leu Ser Pro Arg Pro Ile Ser Tyr Leu Lys Gly Ser Ser Gly Gly
65 70 75 80

Pro Leu Leu Cys Pro Ser Gly His Val Val Gly Ile Phe Arg Ala Ala
85 90 95

Val Cys Thr Arg Gly Val Ala Lys Ala Val Asp Phe Val Pro Val Glu
100 105 110

Ser Met Glu Thr Thr Met Arg Ser Pro Val Phe Thr Asp Asn Ser Thr
115 120 125

Pro Pro Ala Val Pro Gln Ser Phe Gln Val Ala His Leu His Ala Pro
130 135 140

Thr Gly Ser Gly Lys Ser Thr Lys Val Pro Ala Ala Tyr Ala Ala Gln
145 150 155 160

Gly Tyr Lys Val Leu Val Leu Asn Pro Ser Val Ala Ala Thr Leu Gly
165 170 175

Phe Gly Ala Tyr Met Ser Lys Ala His Gly Val Asp Pro Asn Ile Arg
180 185 190

Thr Gly Val Arg Thr Ile Thr Thr Gly Ala Pro Ile Thr Tyr Ser Thr
195 200 205

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Tyr Gly Lys Phe Leu Ala Asp Gly Gly Cys Ser Gly Gly Ala Tyr Asp
    210                 215                 220

Ile Ile Ile Cys Asp Glu Cys His Ser Thr Asp Ser Thr Ser Ile Leu
225                 230                 235                 240

Gly Ile Gly Thr Val Leu Asp Gln Ala Glu Thr Ala Gly Ala Arg Leu
                245                 250                 255

Val Val Leu Ala Thr Ala Thr Pro Pro Gly Ser Val Thr Val Pro His
            260                 265                 270

Pro Asn Ile Glu Glu Val Ala Leu Ser Asn Thr Gly Glu Ile Pro Phe
        275                 280                 285

Tyr Gly Lys Ala Ile Pro Leu Glu Ala Ile Lys Gly Gly Arg His Leu
    290                 295                 300

Ile Phe Cys His Ser Lys Lys Lys Cys Asp Glu Leu Ala Ala Lys Leu
305                 310                 315                 320

Ser Ala Leu Gly Val Asn Ala Val Ala Tyr Tyr Arg Gly Leu Asp Val
                325                 330                 335

Ser Ile Ile Pro Thr Ser Gly Asp Val Val Val Val Ala Thr Asp Ala
            340                 345                 350

Leu Met Thr Gly Tyr Thr Gly Asp Phe Asp Ser Val Ile Asp Cys Asn
        355                 360                 365

Thr Cys Val Thr Ala Asn Ser Lys Ala Thr Cys Thr Thr His His Gly
    370                 375                 380

Ala Pro Asp Thr Asp Leu Ile Glu Ala Asn Leu Leu Trp Arg Gln Glu
385                 390                 395                 400

Met Gly Gly Asn Ile Thr Arg Val Glu Ser Glu Asn Lys Ile Val Ile
                405                 410                 415

Leu Asp Ser Phe Glu Pro Leu Arg Ala Glu Glu Asp Glu Arg Glu Val
            420                 425                 430

Ser Val Ala Ala Glu Ile Leu Arg Lys Thr Arg Lys Phe Pro Ala Ala
        435                 440                 445

Met Pro Val Trp Ala Arg Pro Asp Tyr Asn Pro Pro Leu Leu Glu Ser
    450                 455                 460

Trp Lys Asn Pro Asp Tyr Val Pro Pro Val Val His Gly Ala Asn Ser
465                 470                 475                 480
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<210> 6

<211> 1355
<212> DNA
<213> Sequ&#65533;ncia Artificial

<220>
<223> Poliant&#65533;geno composto das regi&#65533;es NS3 e NS5 de HCV gen&#65533;tipo 1b

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acctggttgg ctggccggca ccgccgggcg ctcgctctat gaccccgtgc acgtgtggca 120

gctctgatct gtatctggtg acccgtcatg cagacgtcat cccggtgcgt cgccgtggtg 180

atagccgtgg ttctctgctg agtccgcgtc cgatttcata cctgaagggc agttccggcg 240

gtccgctgct gtgcccgtcg ggtcacgtgg ttggtatctt tcgtgcagca gtgtgtaccc 300

gtggtgtggc aaaagctgtt gacttcgtcc cggtggaatc tatggaaacc acgatgcgta 360

gtccggtttt taccgataac tccacgccgc cggcagtccc gcagagtttc caagtggcac 420

atctgcacgc accgaccggc tccggcaagt caacgaaagt cccggcagct tatgcggccc 480

agggttacaa ggttctggtc ctgaacccgt cagttgcagc taccctgggc tttggtgcat 540

atatgtcgaa agctcatggc gttgatccga atattcgcac cggcgttcgt acgatcacca 600

cgggtgcccc gattacctat agcacgtacg gtaaattcct ggcagatggc ggttgctctg 660

gcggtgctta cgatattatc atttgcgacg aatgtcatag caccgactca acgtcgatcc 720

tgggcattgg taccgtgctg gatcaagcag aaacggcagg tgcacgcctg gtcgtgctgg 780

caaccgctac gccgccgggt tcagtgaccg ttccgcaccc gaacatcgaa gaagttgcac 840

tgtctaatac cggcgaaatt ccgttttatg gcaaggcgat cccgctggaa gccattaaag 900

gcggtcgcca tctgatcttc tgccacagta aaaagaaatg tgacgaactg gcggccaaac 960

tgtccgcact gggtgttaac gcagtcgcat attaccgtgg tctggatgtg tcgatcattc 1020

cgaccagcgg cgatgttgtc gtggttgcaa ccgacgctct gatgaccggc tatacgggtg 1080

attttgacag cgttattgat tgcaatacct gtgtcacggc gaattccaag gctacctgta 1140

ccacgcatca cggcgcaccg gatacggacc tgattgaagc taatctgctg tggcgccagg 1200

aaatgggcgg taacatcacc cgtgtcgaaa gtgaaaacaa gatcgtgatc ctggattcct 1260

ttgaaccgct gcgcgcggaa gaagacgaac gtgaagttag tgtcgcagct gaaatcctgc 1320

gcaaaacgcg taagttcccg gcagcaatgc cggtg 1355

<210> 7
<211> 514
<212> PRT
<213> Sequ&#65533;ncia Artificial

<220>
<223> Poliant&#65533;geno composto das regi&#65533;es NS3 e NS4 de HCV gen&#65533;tipo 1b

<400> 7

Met Ala Gly Ser Gly Pro Lys Gly Pro Ile Thr Gln Met Tyr Thr Asn
1 5 10 15

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Val Asp Gln Asp Leu Val Gly Trp Pro Ala Pro Pro Gly Ala Arg Ser
            20                  25                  30

Met Thr Pro Cys Thr Cys Gly Ser Ser Asp Leu Tyr Leu Val Thr Arg
        35                  40                  45

His Ala Asp Val Ile Pro Val Arg Arg Arg Gly Asp Ser Arg Gly Ser
    50                  55                  60

Leu Leu Ser Pro Arg Pro Ile Ser Tyr Leu Lys Gly Ser Ser Gly Gly
65                  70                  75                  80

Pro Leu Leu Cys Pro Ser Gly His Val Val Gly Ile Phe Arg Ala Ala
                85                  90                  95

Val Cys Thr Arg Gly Val Ala Lys Ala Val Asp Phe Val Pro Val Glu
            100                 105                 110

Ser Met Glu Thr Thr Met Arg Ser Pro Val Phe Thr Asp Asn Ser Thr
        115                 120                 125

Pro Pro Ala Val Pro Gln Ser Phe Gln Val Ala His Leu His Ala Pro
    130                 135                 140

Thr Gly Ser Gly Lys Ser Thr Lys Val Pro Ala Ala Tyr Ala Ala Gln
145                 150                 155                 160

Gly Tyr Lys Val Leu Val Leu Asn Pro Ser Val Ala Ala Thr Leu Gly
                165                 170                 175

Phe Gly Ala Tyr Met Ser Lys Ala His Gly Val Asp Pro Asn Ile Arg
            180                 185                 190

Thr Gly Val Arg Thr Ile Thr Thr Gly Ala Pro Ile Thr Tyr Ser Thr
        195                 200                 205

Tyr Gly Lys Phe Leu Ala Asp Gly Gly Cys Ser Gly Gly Ala Tyr Asp
    210                 215                 220

Ile Ile Ile Cys Asp Glu Cys His Ser Thr Asp Ser Thr Ser Ile Leu
225                 230                 235                 240

Gly Ile Gly Thr Val Leu Asp Gln Ala Glu Thr Ala Gly Ala Arg Leu
                245                 250                 255

Val Val Leu Ala Thr Ala Thr Pro Pro Gly Ser Val Thr Val Pro His
            260                 265                 270

Pro Asn Ile Glu Glu Val Ala Leu Ser Asn Thr Gly Glu Ile Pro Phe
        275                 280                 285

Tyr Gly Lys Ala Ile Pro Leu Glu Ala Ile Lys Gly Gly Arg His Leu
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290 295 300

Ile Phe Cys His Ser Lys Lys Lys Cys Asp Glu Leu Ala Ala Lys Leu
305 310 315 320

Ser Ala Leu Gly Val Asn Ala Val Ala Tyr Tyr Arg Gly Leu Asp Val
325 330 335

Ser Ile Ile Pro Thr Ser Gly Asp Val Val Val Val Ala Thr Asp Ala
340 345 350

Leu Met Thr Gly Tyr Thr Gly Asp Phe Asp Ser Val Ile Asp Cys Asn
355 360 365

Thr Cys Val Thr Ala Asn Ser Arg Pro Ala Val Ile Pro Asp Arg Glu
370 375 380

Val Leu Tyr Gln Glu Phe Asp Glu Met Glu Glu Cys Ala Ser His Leu
385 390 395 400

Pro Tyr Ile Glu Gln Gly Met Gln Leu Ala Glu Gln Phe Lys Gln Lys
405 410 415

Ser Leu Met Ala Phe Thr Ala Ser Ile Thr Ser Pro Leu Thr Thr Gln
420 425 430

Tyr Thr Leu Leu Phe Asn Ile Leu Gly Gly Trp Val Ala Ala Gln Leu
435 440 445

Ala Pro Pro Ser Ala Ala Ser Ala Phe Val Gly Ala Gly Ile Ala Gly
450 455 460

Ala Ala Val Gly Ser Ile Gly Leu Gly Lys Val Leu Val Asp Ile Leu
465 470 475 480

Ala Gly Tyr Gly Ala Gly Val Ala Gly Ala Leu Val Ala Phe Lys Phe
485 490 495

Ala Ser Arg Gly Asn His Val Ser Pro Thr His Tyr Val Pro Glu Ser
500 505 510

Asp Ala

<210> 8
<211> 1553
<212> DNA
<213> Sequ&#65533;ncia Artificial

<220>
<223> Poliant&#65533;geno composto das regi&#65533;es NS3 e NS4 de HCV gen&#65533;tipo 1b

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acctggttgg ctggccggca ccgccgggcg ctcgctctat gaccccgtgc acgtgtggca 120

gctctgatct gtatctggtg acccgtcatg cagacgtcat cccggtgcgt cgccgtggtg 180

atagccgtgg ttctctgctg agtccgcgtc cgatttcata cctgaagggc agttccggcg 240

gtccgctgct gtgcccgtcg ggtcacgtgg ttggtatctt tcgtgcagca gtgtgtaccc 300

gtggtgtggc aaaagctgtt gacttcgtcc cggtggaatc tatggaaacc acgatgcgta 360

gtccggtttt taccgataac tccacgccgc cggcagtccc gcagagtttc caagtggcac 420

atctgcacgc accgaccggc tccggcaagt caacgaaagt cccggcagct tatgcggccc 480

agggttacaa ggttctggtc ctgaacccgt cagttgcagc taccctgggc tttggtgcat 540

atatgtcgaa agctcatggc gttgatccga atattcgcac cggcgttcgt acgatcacca 600

cgggtgcccc gattacctat agcacgtacg gtaaattcct ggcagatggc ggttgctctg 660

gcggtgctta cgatattatc atttgcgacg aatgtcatag caccgactca acgtcgatcc 720

tgggcattgg taccgtgctg gatcaagcag aaacggcagg tgcacgcctg gtcgtgctgg 780

caaccgctac gccgccgggt tcagtgaccg ttccgcaccc gaacatcgaa gaagttgcac 840

tgtctaatac cggcgaaatt ccgttttatg gcaaggcgat cccgctggaa gccattaaag 900

gcggtcgcca tctgatcttc tgccacagta aaaagaaatg tgacgaactg gcggccaaac 960

tgtccgcact gggtgttaac gcagtcgcat attaccgtgg tctggatgtg tcgatcattc 1020

cgaccagcgg cgatgttgtc gtggttgcaa ccgacgctct gatgaccggc tatacgggtg 1080

attttgacag cgttattgat tgcaatacct gtgtcacggc gaattcccgt ccggccgtta 1140

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tgccgtacat cgaacagggc atgcaactgg cagaacagtt taaacaaaag tctctgatgg 1260

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caggtattgc tggtgcagca gtcggctcta tcggtctggg taaagtcctg gtggatattc 1440

tggcaggtta tggtgcaggt gtcgcaggtg ccctggtggc atttaaattc gctagccgcg 1500

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<210> 9
<211> 298
<212> PRT
<213> Sequ&#65533;ncia Artificial

<220>
<223> Poliant&#65533;geno composto das regi&#65533;es NC e NS5 de HCV gen&#65533;tipo 1b

<400> 9

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1 5 10 15

Asn Thr Asn Arg Arg Pro Gln Asp Val Lys Phe Pro Gly Gly Gly Gln
20 25 30

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Ile Val Gly Gly Val Tyr Leu Leu Pro Arg Arg Gly Pro Arg Leu Gly
        35                  40                  45

Val Arg Ala Thr Arg Lys Thr Ser Glu Arg Pro Gln Pro Arg Gly Arg
    50                  55                  60

Arg Gln Pro Ile Pro Lys Ala Arg Gln Pro Glu Gly Arg Ala Trp Ala
65                  70                  75                  80

Gln Pro Gly Tyr Pro Trp Pro Leu Tyr Gly Asn Glu Gly Leu Gly Trp
                85                  90                  95

Ala Gly Trp Leu Leu Ser Pro Arg Gly Ser Arg Pro Ser Trp Gly Pro
            100                 105                 110

Thr Asp Pro Arg Arg Arg Ser Arg Asn Leu Gly Lys Val Ile Asp Thr
        115                 120                 125

Leu Thr Cys Gly Phe Ala Asp Leu Met Gly Tyr Ile Pro Leu Val Gly
    130                 135                 140

Ala Pro Leu Gly Gly Ala Ala Arg Ala Leu Ala His Gly Val Arg Val
145                 150                 155                 160

Leu Glu Asp Gly Val Asn Tyr Ala Thr Gly Asn Leu Pro Gly Cys Ser
                165                 170                 175

Phe Ser Ile Phe Leu Leu Ala Leu Leu Ser Cys Leu Thr Ile Pro Ala
            180                 185                 190

Ser Ala Asn Ser Lys Ala Thr Cys Thr Thr His His Gly Ala Pro Asp
        195                 200                 205

Thr Asp Leu Ile Glu Ala Asn Leu Leu Trp Arg Gln Glu Met Gly Gly
    210                 215                 220

Asn Ile Thr Arg Val Glu Ser Glu Asn Lys Ile Val Ile Leu Asp Ser
225                 230                 235                 240

Phe Glu Pro Leu Arg Ala Glu Glu Asp Glu Arg Glu Val Ser Val Ala
                245                 250                 255

Ala Glu Ile Leu Arg Lys Thr Arg Lys Phe Pro Ala Ala Met Pro Val
            260                 265                 270

Trp Ala Arg Pro Asp Tyr Asn Pro Pro Leu Leu Glu Ser Trp Lys Asn
        275                 280                 285

Pro Asp Tyr Val Pro Pro Val Val His Gly
    290                 295
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<210> 10

<211> 902
<212> DNA
<213> Sequ&#65533;ncia Artificial

<220>
<223> Poliant&#65533;geno composto das regi&#65533;es NC e NS5 de HCV gen&#65533;tipo 1b

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gccgtccgca agatgtcaag tttccgggtg gtggtcaaat cgtcggcggt gtgtatctgc 120

tgccgcgtcg cggtccgcgt ctgggtgtgc gcgcaacccg taaaacgtcc gaacgtccgc 180

agccgcgtgg tcgtcgccaa ccgattccga aggctcgtca gccggaaggt cgtgcatggg 240

ctcaaccggg ctatccgtgg ccgctgtacg gtaacgaagg tctgggttgg gcaggttggc 300

tgctgagccc gcgtggcagt cgtccgtcct ggggtccgac cgatccgcgt cgccgttctc 360

gtaatctggg taaagttatt gataccctga cgtgcggctt tgcggacctg atgggttata 420

tcccgctggt cggcgcaccg ctgggcggtg cagcacgtgc gctggcgcat ggcgtgcgtg 480

ttctggaaga cggtgttaac tacgccaccg gcaatctgcc gggttgcagc ttttctattt 540

tcctgctggc actgctgtca tgtctgacga tcccggcttc ggcgaattcc aaggctacct 600

gtaccacgca tcacggcgca ccggatacgg acctgattga agctaatctg ctgtggcgcc 660

aggaaatggg cggtaacatc acccgtgtcg aaagtgaaaa caagatcgtg atcctggatt 720

cctttgaacc gctgcgcgcg gaagaagacg aacgtgaagt tagtgtcgca gctgaaatcc 780

tgcgcaaaac gcgtaagttc ccggcagcaa tgccggtgtg ggcacgtccg gattataacc 840

cgccgctgct ggaatcctgg aaaaatccgg actacgttcc gccggtggtt cacggtaagc 900

tt 902

<210> 11
<211> 26
<212> DNA
<213> Sequ&#65533;ncia Artificial

<220>
<223> Iniciador direto

<400> 11
ccatggctgg atcctcaacc aatccg 26

<210> 12
<211> 39
<212> DNA
<213> Sequ&#65533;ncia Artificial

<220>
<223> Iniciador reverso

<400> 12
catgaagctt ttatgcgtag ctttccggaa cgtagtggg 39

<210> 13
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