761542000740SEQLIST

SEQUENCE LISTING

<110> Cedars-Sinai Medical Center
MEDINA-KAUWE, Lali K.

<120> DRUG-DELIVERY NANOPARTICLES AND
TREATMENTS FOR DRUG-RESISTANT CANCER

<130> 761542000740

<140> Not Yet Assigned
<141> Concurrently Herewith

<150> US 62/342,829
<151> 2016-05-27

<160> 6

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 571
<212> PRT
<213> Human adenovirus 5

<400> 1

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Met Arg Arg Ala Ala Met Tyr Glu Glu Gly Pro Pro Pro Ser Tyr Glu
 1               5                  10                  15
Ser Val Val Ser Ala Ala Pro Val Ala Ala Ala Leu Gly Ser Pro Phe
            20                  25                  30
Asp Ala Pro Leu Asp Pro Pro Phe Val Pro Pro Arg Tyr Leu Arg Pro
        35                  40                  45
Thr Gly Gly Arg Asn Ser Ile Arg Tyr Ser Glu Leu Ala Pro Leu Phe
    50                  55                  60
Asp Thr Thr Arg Val Tyr Leu Val Asp Asn Lys Ser Thr Asp Val Ala
65                  70                  75                  80
Ser Leu Asn Tyr Gln Asn Asp His Ser Asn Phe Leu Thr Thr Val Ile
                85                  90                  95
Gln Asn Asn Asp Tyr Ser Pro Gly Glu Ala Ser Thr Gln Thr Ile Asn
            100                 105                 110
Leu Asp Asp Arg Ser His Trp Gly Gly Asp Leu Lys Thr Ile Leu His
        115                 120                 125
Thr Asn Met Pro Asn Val Asn Glu Phe Met Phe Thr Asn Lys Phe Lys
    130                 135                 140
Ala Arg Val Met Val Ser Arg Leu Pro Thr Lys Asp Asn Gln Val Glu
145                 150                 155                 160
```

```
Leu Lys Tyr Glu Trp Val Glu Phe Thr Leu Pro Glu Gly Asn Tyr Ser
                165                 170                 175
Glu Thr Met Thr Ile Asp Leu Met Asn Asn Ala Ile Val Glu His Tyr
            180                 185                 190
Leu Lys Val Gly Arg Gln Asn Gly Val Leu Glu Ser Asp Ile Gly Val
        195                 200                 205
Lys Phe Asp Thr Arg Asn Phe Arg Leu Gly Phe Asp Pro Val Thr Gly
    210                 215                 220
Leu Val Met Pro Gly Val Tyr Thr Asn Glu Ala Phe His Pro Asp Ile
225                 230                 235                 240
Ile Leu Leu Pro Gly Cys Gly Val Asp Phe Thr His Ser Arg Leu Ser
                245                 250                 255
Asn Leu Leu Gly Ile Arg Lys Arg Gln Pro Phe Gln Glu Gly Phe Arg
            260                 265                 270
Ile Thr Tyr Asp Asp Leu Glu Gly Gly Asn Ile Pro Ala Leu Leu Asp
        275                 280                 285
Val Asp Ala Tyr Gln Ala Ser Leu Lys Asp Asp Thr Glu Gln Gly Gly
    290                 295                 300
Gly Gly Ala Gly Gly Ser Asn Ser Ser Gly Ser Gly Ala Glu Glu Asn
305                 310                 315                 320
Ser Asn Ala Ala Ala Ala Ala Met Gln Pro Val Glu Asp Met Asn Asp
                325                 330                 335
His Ala Ile Arg Gly Asp Thr Phe Ala Thr Arg Ala Glu Glu Lys Arg
            340                 345                 350
Ala Glu Ala Glu Ala Ala Ala Glu Ala Ala Ala Pro Ala Ala Gln Pro
        355                 360                 365
Glu Val Glu Lys Pro Gln Lys Lys Pro Val Ile Lys Pro Leu Thr Glu
    370                 375                 380
Asp Ser Lys Lys Arg Ser Tyr Asn Leu Ile Ser Asn Asp Ser Thr Phe
385                 390                 395                 400
Thr Gln Tyr Arg Ser Trp Tyr Leu Ala Tyr Asn Tyr Gly Asp Pro Gln
                405                 410                 415
Thr Gly Ile Arg Ser Trp Thr Leu Leu Cys Thr Pro Asp Val Thr Cys
            420                 425                 430
Gly Ser Glu Gln Val Tyr Trp Ser Leu Pro Asp Met Met Gln Asp Pro
        435                 440                 445
Val Thr Phe Arg Ser Thr Arg Gln Ile Ser Asn Phe Pro Val Val Gly
    450                 455                 460
Ala Glu Leu Leu Pro Val His Ser Lys Ser Phe Tyr Asn Asp Gln Ala
465                 470                 475                 480
Val Tyr Ser Gln Leu Ile Arg Gln Phe Thr Ser Leu Thr His Val Phe
                485                 490                 495
Asn Arg Phe Pro Glu Asn Gln Ile Leu Ala Arg Pro Pro Ala Pro Thr
            500                 505                 510
Ile Thr Thr Val Ser Glu Asn Val Pro Ala Leu Thr Asp His Gly Thr
        515                 520                 525
Leu Pro Leu Arg Asn Ser Ile Gly Gly Val Gln Arg Val Thr Ile Thr
    530                 535                 540
```

```
Asp Ala Arg Arg Arg Thr Cys Pro Tyr Val Tyr Lys Ala Leu Gly Ile
545                 550                 555                 560
Val Ser Pro Arg Val Leu Ser Ser Arg Thr Phe
                565                 570
```

<210> 2
<211> 207
<212> PRT
<213> Homo sapiens

<400> 2

```
Glu Leu Leu Pro Pro Gln Leu Lys Glu Met Lys Ser Gln Glu Ser Ala
 1               5                  10                  15
Ala Gly Ser Lys Leu Val Leu Arg Cys Glu Thr Ser Ser Glu Tyr Ser
            20                  25                  30
Ser Leu Arg Phe Lys Trp Phe Lys Asn Gly Asn Glu Leu Asn Arg Lys
        35                  40                  45
Asn Lys Pro Gln Asn Ile Lys Ile Gln Lys Lys Pro Gly Lys Ser Glu
    50                  55                  60
Leu Arg Ile Asn Lys Ala Ser Leu Ala Asp Ser Gly Glu Tyr Met Cys
65                  70                  75                  80
Lys Val Ile Ser Lys Leu Gly Asn Asp Ser Ala Ser Ala Asn Ile Ala
                85                  90                  95
Ile Val Glu Ser Asn Glu Ile Ile Thr Gly Met Pro Ala Ser Thr Glu
            100                 105                 110
Gly Ala Tyr Val Ser Ser Glu Ser Pro Ile Arg Ile Ser Val Ser Thr
        115                 120                 125
Glu Gly Ala Asn Thr Ser Ser Ser Thr Ser Thr Ser Thr Thr Gly Thr
    130                 135                 140
Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
145                 150                 155                 160
Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
                165                 170                 175
Leu Cys Lys Cys Gln Pro Gly Phe Thr Gly Ala Arg Cys Thr Glu Asn
            180                 185                 190
Val Pro Met Lys Val Gln Asn Gln Glu Lys Ala Glu Glu Leu Tyr
        195                 200                 205
```

<210> 3
<211> 796
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 3

```
Glu Leu Leu Pro Pro Gln Leu Lys Glu Met Lys Ser Gln Glu Ser Ala
 1               5                  10                  15
Ala Gly Ser Lys Leu Val Leu Arg Cys Glu Thr Ser Ser Glu Tyr Ser
            20                  25                  30
Ser Leu Arg Phe Lys Trp Phe Lys Asn Gly Asn Glu Leu Asn Arg Lys
        35                  40                  45
Asn Lys Pro Gln Asn Ile Lys Ile Gln Lys Lys Pro Gly Lys Ser Glu
    50                  55                  60
Leu Arg Ile Asn Lys Ala Ser Leu Ala Asp Ser Gly Glu Tyr Met Cys
65                  70                  75                  80
Lys Val Ile Ser Lys Leu Gly Asn Asp Ser Ala Ser Ala Asn Ile Ala
                85                  90                  95
Ile Val Glu Ser Asn Glu Ile Ile Thr Gly Met Pro Ala Ser Thr Glu
            100                 105                 110
Gly Ala Tyr Val Ser Ser Glu Ser Pro Ile Arg Ile Ser Val Ser Thr
        115                 120                 125
Glu Gly Ala Asn Thr Ser Ser Ser Thr Ser Thr Ser Thr Thr Gly Thr
    130                 135                 140
Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
145                 150                 155                 160
Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
                165                 170                 175
Leu Cys Lys Cys Gln Pro Gly Phe Thr Gly Ala Arg Cys Thr Glu Asn
            180                 185                 190
Val Pro Met Lys Val Gln Asn Gln Glu Lys Ala Glu Glu Leu Tyr Gly
        195                 200                 205
Gly Ser Gly Gly Ser Arg Ser Met Arg Arg Ala Ala Met Tyr Glu Glu
    210                 215                 220
Gly Pro Pro Pro Ser Tyr Glu Ser Val Val Ser Ala Ala Pro Val Ala
225                 230                 235                 240
Ala Ala Leu Gly Ser Pro Phe Asp Ala Pro Leu Asp Pro Pro Phe Val
                245                 250                 255
Pro Pro Arg Tyr Leu Arg Pro Thr Gly Gly Arg Asn Ser Ile Arg Tyr
            260                 265                 270
Ser Glu Leu Ala Pro Leu Phe Asp Thr Thr Arg Val Tyr Leu Val Asp
        275                 280                 285
Asn Lys Ser Thr Asp Val Ala Ser Leu Asn Tyr Gln Asn Asp His Ser
    290                 295                 300
Asn Phe Leu Thr Thr Val Ile Gln Asn Asn Asp Tyr Ser Pro Gly Glu
305                 310                 315                 320
Ala Ser Thr Gln Thr Ile Asn Leu Asp Asp Arg Ser His Trp Gly Gly
                325                 330                 335
Asp Leu Lys Thr Ile Leu His Thr Asn Met Pro Asn Val Asn Glu Phe
            340                 345                 350
Met Phe Thr Asn Lys Phe Lys Ala Arg Val Met Val Ser Arg Leu Pro
        355                 360                 365
Thr Lys Asp Asn Gln Val Glu Leu Lys Tyr Glu Trp Val Glu Phe Thr
```

```
    370                 375                 380
Leu Pro Glu Gly Asn Tyr Ser Glu Thr Met Thr Ile Asp Leu Met Asn
385                 390                 395                 400
Asn Ala Ile Val Glu His Tyr Leu Lys Val Gly Arg Gln Asn Gly Val
                405                 410                 415
Leu Glu Ser Asp Ile Gly Val Lys Phe Asp Thr Arg Asn Phe Arg Leu
            420                 425                 430
Gly Phe Asp Pro Val Thr Gly Leu Val Met Pro Gly Val Tyr Thr Asn
        435                 440                 445
Glu Ala Phe His Pro Asp Ile Ile Leu Leu Pro Gly Cys Gly Val Asp
    450                 455                 460
Phe Thr His Ser Arg Leu Ser Asn Leu Leu Gly Ile Arg Lys Arg Gln
465                 470                 475                 480
Pro Phe Gln Glu Gly Phe Arg Ile Thr Tyr Asp Asp Leu Glu Gly Gly
                485                 490                 495
Asn Ile Pro Ala Leu Leu Asp Val Asp Ala Tyr Gln Ala Ser Leu Lys
            500                 505                 510
Asp Asp Thr Glu Gln Gly Gly Gly Gly Ala Gly Gly Ser Asn Ser Ser
        515                 520                 525
Gly Ser Gly Ala Glu Glu Asn Ser Asn Ala Ala Ala Ala Ala Met Gln
    530                 535                 540
Pro Val Glu Asp Met Asn Asp His Ala Ile Arg Gly Asp Thr Phe Ala
545                 550                 555                 560
Thr Arg Ala Glu Glu Lys Arg Ala Glu Ala Glu Ala Ala Ala Glu Ala
                565                 570                 575
Ala Ala Pro Ala Ala Gln Pro Glu Val Glu Lys Pro Gln Lys Lys Pro
            580                 585                 590
Val Ile Lys Pro Leu Thr Glu Asp Ser Lys Lys Arg Ser Tyr Asn Leu
        595                 600                 605
Ile Ser Asn Asp Ser Thr Phe Thr Gln Tyr Arg Ser Trp Tyr Leu Ala
    610                 615                 620
Tyr Asn Tyr Gly Asp Pro Gln Thr Gly Ile Arg Ser Trp Thr Leu Leu
625                 630                 635                 640
Cys Thr Pro Asp Val Thr Cys Gly Ser Glu Gln Val Tyr Trp Ser Leu
                645                 650                 655
Pro Asp Met Met Gln Asp Pro Val Thr Phe Arg Ser Thr Arg Gln Ile
            660                 665                 670
Ser Asn Phe Pro Val Val Gly Ala Glu Leu Leu Pro Val His Ser Lys
        675                 680                 685
Ser Phe Tyr Asn Asp Gln Ala Val Tyr Ser Gln Leu Ile Arg Gln Phe
    690                 695                 700
Thr Ser Leu Thr His Val Phe Asn Arg Phe Pro Glu Asn Gln Ile Leu
705                 710                 715                 720
Ala Arg Pro Pro Ala Pro Thr Ile Thr Thr Val Ser Glu Asn Val Pro
                725                 730                 735
Ala Leu Thr Asp His Gly Thr Leu Pro Leu Arg Asn Ser Ile Gly Gly
            740                 745                 750
Val Gln Arg Val Thr Ile Thr Asp Ala Arg Arg Arg Thr Cys Pro Tyr
```

```
        755                 760                 765
Val Tyr Lys Ala Leu Gly Ile Val Ser Pro Arg Val Leu Ser Ser Arg
    770                 775                 780
Thr Phe Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
785                 790                 795
```

<210> 4
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 4

```
Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 1               5                  10
```

<210> 5
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 5
cgcctgagca acgcggcggg catccgcaag 30

<210> 6
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 6
gcggactcgt tgcgccgccc gtaggcgttc 30