

SEQUENCE LISTING

<110> F. Hoffmann-La Roche AG
 Hoffmann-La Roche Inc.

<120> Mammalian cell lines with SIRT-1 gene knockout

<130> P35610-W0

<150> EP19182558.7
 <151> 2019-06-26

<160> 18

<170> PatentIn version 3.5

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 <213> Simian virus 40

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tcatgtctg	129

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 <212> DNA
 <213> Bos taurus

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tggaagggtc cactcccact gtcctttcct aataaaatga ggaaattgca tcgcattgtc	120
tgagtaggtg tcattctatt ctggggggtg ggggtggggca ggacagcaag ggggaggatt	180

gggaagacaa tagcaggcat gctggggatg cggtgggctc tatgg 225

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<211> 73
<212> DNA
<213> Homo sapiens

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caggataata tatggtaggg ttcataagcca gagtaacctt tttttttaat ttttatttta 60
ttttattttt gag 73

<210> 10
<211> 288
<212> DNA
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gcctaggctt ttgcaaaaag ctcccgggag cttgtatatc cattttcg 288

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tacctgagca cccagtccgc cctgagcaaa gaccccaacg agaagcgcga tcacatggtc	660
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Gly Glu Pro Gly Gly Ala Ala Pro Glu Arg Glu Val Pro Ala Ala Ala
50 55 60

Arg Gly Cys Pro Gly Ala Ala Ala Ala Ala Leu Trp Arg Glu Ala Glu
65 70 75 80

Ala Glu Ala Ala Ala Ala Gly Gly Glu Gln Glu Ala Gln Ala Thr Ala
85 90 95

Ala Ala Gly Glu Gly Asp Asn Gly Pro Gly Leu Gln Gly Pro Ser Arg
100 105 110

Glu Pro Pro Leu Ala Asp Asn Leu Tyr Asp Glu Asp Asp Asp Asp Glu
115 120 125

Gly Glu Glu Glu Glu Glu Ala Ala Ala Ala Ala Ile Gly Tyr Arg Asp
130 135 140

Asn Leu Leu Phe Gly Asp Glu Ile Ile Thr Asn Gly Phe His Ser Cys
145 150 155 160

Glu Ser Asp Glu Glu Asp Arg Ala Ser His Ala Ser Ser Ser Asp Trp
165 170 175

Thr Pro Arg Pro Arg Ile Gly Pro Tyr Thr Phe Val Gln Gln His Leu
180 185 190

Met Ile Gly Thr Asp Pro Arg Thr Ile Leu Lys Asp Leu Leu Pro Glu
195 200 205

Thr Ile Pro Pro Pro Glu Leu Asp Asp Met Thr Leu Trp Gln Ile Val
210 215 220

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

Asn Thr Ile Glu Asp Ala Val Lys Leu Leu Gln Glu Cys Lys Lys Ile
245 250 255

Ile Val Leu Thr Gly Ala Gly Val Ser Val Ser Cys Gly Ile Pro Asp
260 265 270

Phe Arg Ser Arg Asp Gly Ile Tyr Ala Arg Leu Ala Val Asp Phe Pro
275 280 285

Asp Leu Pro Asp Pro Gln Ala Met Phe Asp Ile Glu Tyr Phe Arg Lys
290 295 300

Asp Pro Arg Pro Phe Phe Lys Phe Ala Lys Glu Ile Tyr Pro Gly Gln
305 310 315 320

Phe Gln Pro Ser Leu Cys His Lys Phe Ile Ala Leu Ser Asp Lys Glu
325 330 335

Gly Lys Leu Leu Arg Asn Tyr Thr Gln Asn Ile Asp Thr Leu Glu Gln
340 345 350

Val Ala Gly Ile Gln Arg Ile Ile Gln Cys His Gly Ser Phe Ala Thr
355 360 365

Ala Ser Cys Leu Ile Cys Lys Tyr Lys Val Asp Cys Glu Ala Val Arg
370 375 380

Gly Asp Ile Phe Asn Gln Val Val Pro Arg Cys Pro Arg Cys Pro Ala
385 390 395 400

Asp Glu Pro Leu Ala Ile Met Lys Pro Glu Ile Val Phe Phe Gly Glu
405 410 415

Asn Leu Pro Glu Gln Phe His Arg Ala Met Lys Tyr Asp Lys Asp Glu
420 425 430

Val Asp Leu Leu Ile Val Ile Gly Ser Ser Leu Lys Val Arg Pro Val
435 440 445

Ala Leu Ile Pro Ser Ser Ile Pro His Glu Val Pro Gln Ile Leu Ile
450 455 460

Asn Arg Glu Pro Leu Pro His Leu His Phe Asp Val Glu Leu Leu Gly
465 470 475 480

Asp Cys Asp Val Ile Ile Asn Glu Leu Cys His Arg Leu Gly Gly Glu
485 490 495

Tyr Ala Lys Leu Cys Cys Asn Pro Val Lys Leu Ser Glu Ile Thr Glu
500 505 510

Lys Pro Pro Arg Thr Gln Lys Glu Leu Ala Tyr Leu Ser Glu Leu Pro
515 520 525

Pro Thr Pro Leu His Val Ser Glu Asp Ser Ser Ser Pro Glu Arg Thr
530 535 540

Ser Pro Pro Asp Ser Ser Val Ile Val Thr Leu Leu Asp Gln Ala Ala
545 550 555 560

Lys Ser Asn Asp Asp Leu Asp Val Ser Glu Ser Lys Gly Cys Met Glu
565 570 575

Glu Lys Pro Gln Glu Val Gln Thr Ser Arg Asn Val Glu Ser Ile Ala
580 585 590

Glu Gln Met Glu Asn Pro Asp Leu Lys Asn Val Gly Ser Ser Thr Gly
595 600 605

Glu Lys Asn Glu Arg Thr Ser Val Ala Gly Thr Val Arg Lys Cys Trp
610 615 620

Pro Asn Arg Val Ala Lys Glu Gln Ile Ser Arg Arg Leu Asp Gly Asn
625 630 635 640

Gln Tyr Leu Phe Leu Pro Pro Asn Arg Tyr Ile Phe His Gly Ala Glu
645 650 655

Val Tyr Ser Asp Ser Glu Asp Asp Val Leu Ser Ser Ser Ser Cys Gly
660 665 670

Ser Asn Ser Asp Ser Gly Thr Cys Gln Ser Pro Ser Leu Glu Glu Pro
675 680 685

Met Glu Asp Glu Ser Glu Ile Glu Glu Phe Tyr Asn Gly Leu Glu Asp
690 695 700

Glu Pro Asp Val Pro Glu Arg Ala Gly Gly Ala Gly Phe Gly Thr Asp
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Val Thr Asp Met Asn Tyr Pro Ser Asn Lys Ser
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<212> PRT
<213> Cricetulus griseus

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35 40 45

Ala Ala Ser Ala Ala Ala Pro Ala Ala Ala Leu Trp Arg Glu Ala Val
50 55 60

Gly Ala Ala Ala Ala Gly Ala Glu Gln Glu Ala Arg Arg Pro Pro Arg
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Pro Gly Arg Lys Gln Trp Val Gly Pro Ala Ala Gly Ala Glu Gly Cys
85 90 95

Arg Arg Leu Arg Arg Arg Arg Gly Arg Gly Gly Arg Arg Gly Gly Gly
100 105 110

Gly Gly Gly Gly Gly Ser Asp Arg Leu Pro Arg Phe Ser Phe Ser Gly
115 120 125

Ile Gly Pro Tyr Thr Phe Val Gln Gln His Leu Met Ile Gly Thr Asp
130 135 140

Pro Arg Thr Ile Leu Lys Asp Leu Leu Pro Glu Thr Ile Pro Pro Pro
145 150 155 160

Glu Leu Asp Asp Met Thr Leu Trp Gln Ile Val Ile Asn Ile Leu Ser
165 170 175

Glu Pro Pro Lys Arg Lys Lys Arg Lys Asp Ile Asn Thr Ile Glu Asp
180 185 190

Ala Val Lys Leu Leu Gln Glu Cys Lys Lys Ile Ile Val Leu Thr Gly
195 200 205

Ala Gly Val Ser Val Ser Cys Gly Ile Pro Asp Phe Arg Ser Arg Asp
210 215 220

Gly Ile Tyr Ala Arg Leu Ala Val Asp Phe Pro Asp Leu Pro Asp Pro
225 230 235 240

Gln Ala Met Phe Asp Ile Glu Tyr Phe Arg Lys Asp Pro Arg Pro Phe
245 250 255

Phe Lys Phe Ala Lys Glu Ile Tyr Pro Gly Gln Phe Gln Pro Ser Leu
260 265 270

Cys His Lys Phe Ile Ala Leu Ser Asp Lys Glu Gly Lys Leu Leu Arg
275 280 285

Asn Tyr Thr Gln Asn Ile Asp Thr Leu Glu Gln Val Ala Gly Ile Gln
290 295 300

Arg Ile Ile Gln Cys His Gly Ser Phe Ala Thr Ala Ser Cys Leu Ile
305 310 315 320

Cys Lys Tyr Lys Val Asp Cys Glu Thr Val Arg Gly Asp Ile Phe Asn
325 330 335

Gln Val Val Pro Arg Cys Pro Arg Cys Pro Ala Asp Glu Pro Leu Ala
340 345 350

Ile Met Lys Pro Glu Ile Val Phe Phe Gly Glu Asn Leu Pro Glu Gln
355 360 365

Phe His Arg Ala Met Lys Tyr Asp Lys Asp Glu Val Asp Leu Leu Ile
370 375 380

Val Ile Gly Ser Ser Leu Lys Val Arg Pro Val Ala Leu Ile Pro Ser
385 390 395 400

Ser Ile Pro His Glu Val Pro Gln Ile Leu Ile Asn Arg Glu Pro Leu

405

410

415

Pro His Leu His Phe Asp Val Glu Leu Leu Gly Asp Cys Asp Val Ile
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Ile Asn Glu Leu Cys His Arg Leu Gly Gly Glu Tyr Ala Lys Leu Cys
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Cys Asn Pro Val Lys Leu Ser Glu Ile Thr Glu Lys Pro Pro Arg Thr
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Gln Lys Glu Leu Val His Leu Ser Glu Leu Pro Pro Thr Pro Leu His
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Ile Ser Glu Asp Ser Ser Ser Pro Glu Arg Thr Val Pro Gln Asp Ser
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Ala Ser Met Ile Ala Thr Cys Val Asp Gln Ala Thr Glu Asn Arg Val
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Asp Leu Glu Val Ser Glu Ser Glu Gly Cys Val Glu Glu Lys Ser Gln
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Glu Ala Gln Thr Cys Arg Ser Val Glu Ser Ile Asn Val Glu Asn Pro
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Asp Leu Lys Ala Val Gly Ser Ser Thr Gly Glu Lys Asn Glu Arg Thr
 545 550 555 560

Ser Val Ala Glu Ala Val Arg Lys Cys Trp Pro Asn Arg Leu Ala Lys
 565 570 575

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 580 585 590

Pro Asn Arg Tyr Ile Phe His Gly Ala Glu Val Tyr Ser Asp Ser Glu
 595 600 605

Asp Asp Ile Leu Ser Ser Ser Ser Cys Gly Ser Asn Ser Asp Ser Gly
 610 615 620

Thr Cys Gln Ser Pro Ser Leu Glu Glu Pro Met Glu Asp Glu Ser Glu
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660 665 670

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675 680 685

Pro Ser Asp Lys Ser
690