eolf-seql
SEQUENCE LISTING

<110> VRIJE UNIVERSITEIT BRUSSEL
VIB vzw
Universiteit Gent

<120> MUSCLE-SPECIFIC NUCLEIC ACID REGULATORY ELEMENTS AND METHODS AND USE THEREOF

<130> VUB-062-PCT

<150> 14151960.3
<151> 2014-01-21

<160> 46

<170> PatentIn version 3.5

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ggcttgccct gagtgcagct ttgcctgggc atcccagctg gctcccttag gctctccctg 180

accactctgc ccctggtcct gcctacccac ctggtcacat ttccccctgg ctgctctggc 240

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ctgggtaccc ttttcctgag ctcagcttca taccgaggcg atgaggccaa acgggctggt 480

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gccctacatg aggcttttct atctgtaaag tcaagcaatg gctgggaggc acacacaacc 600

ccccgccccc ccgcaggctt ctccttcatt ggcccgggca aggtccctgc ttcctctcag 660

gccgtctctg cacaagcaca cacacttccc ttccctgtcc acaggtggac aatgccctgg 720

gctaggagcc agccctcgca ggccctgtca acagcctgcc accaactagt ctagaaaatt 780

ctgtgaacac cagatcagtg ggttttgccc taatcactgg cctcagtttc cccatttacc 840

tcttcagccc gtgcggggtg tggagggagc atatttcatt cctgacagtt tggtgtgttg 900

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ccaggggtg ggcgccctca accccgtccc gccgcccggg 1000

<210> 23
<211> 1000
<212> DNA
<213> Artificial

<220>
<223> Fragment of ATP2A1 regulatory element

<400> 23
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aaacacaggc tctgctcttg gaatcagtct tcctgatctg tggctgtgcc ctccaacaga 120

gggcacccct gggcttccca gctctggggg tagtgggtgc caacaaggag gggcctgggg 180

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gggtgctggg ttcttagtga gatggccagt gaaggctgtg gtgccccgag gtaagcaggg 600

cctgatcccc tcctaatctt ccagcagcaa ctggtgctct gaggctcccc ctcccccagc 660

cctgccagcc ttcagggacc tgccttccaa agatgggcag gggaggggga cgaggacacc 720

cacccactcc tcagaccagc atgtcttggc tgttggggcc tgagagactt tccctctaag 780

cctttcttta cagatggtta aaccgaagtt ctgcactcat cagggactgg ccagggtgtc 840

tctgtgtccc atgcttttag ctccagccct caggtgtgac aggaggatca ctttccatcc 900

ctgggcgtgg agacccctgt gggaagggat ccccgagggc gcctctggct cagcctccct 960

ccatggcagt tcacacccac agccttccct agagcagccc 1000

<210> 24
<211> 999
<212> DNA
<213> Artificial

<220>
<223> Fragment of TNNI1 regulatory element

<400> 24
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accctgcatc tcttataagg caatatggaa atgaggcccc tgaacccatg ccccaaaagc 120

ccaagagggc taaagactca gctttcaggg atttttcagt ggctctggtg cacgtgggat 180

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ctgagggtct gcagacactc tgcatccccc tccagatggg tttcctggaa tctagatttc 360

ccaggttcca aaggacaccc gagtctcatg cctggaactc agtgagacta attcacctct 420

cctctgccct aatcttcatc tccagccaga agccaacaga tcccagggga ctggagccac 480

aggggctgca cctgtttacc gggtattttt aggatggttg atgaacacat aatacccacc 540

ctatagtcag agaaagacaa tgcctgctat gttaatcctg tggctattat agtctgtcat 600

ctcatgggtt ggggcaggac actgaccctc tcagaggcca gagagaggcc tcgcaagcag 660

gaggttaggg agccccagcc atgctcccca tttggagaag gagagagtaa tgggcagggg 720

tgtcctaagg agacacaccc cagtgcccac agaggtaaag gccctgccct ctctacaacg 780

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aggagcagct agaggggaga aggaatttag gggctttgc 999

<210> 25
<211> 999
<212> DNA
<213> Artificial

<220>
<223> Fragment of TNNI1 regulatory element

<400> 25
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actatcccaa ccccaatgaa cacagctttg gccacctccc ctgaatctcc caacgggtca 180

gaaagccttc tgggcctccc tccacctctg cctccgccac caggggaggg taaggctggg 240

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gggcagctgc ttattcttag ggctctgctt ctccaaagac actgaggaag tccaaaggaa 420

acaccagctg gcgaagagcc acctccaggc ccatctgtcc atcatcagcc tccaggaatg 480

ccagtgtcca gagggcacca ggtctgcgtc tgtctccctg ggatgtgcct tgtccttggt 540

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cctgcctcac tgacaaatgc cagaccaagg ggtcccacgt caggcaagag gcctcagcct 720

gtgctctgac acccctcaga cgggggccct tgccaggctc tgtggaagac aagcgaggac 780

tgataagtca ggatgaagat agcagccact ggaaggcttg gagagccagg attccatctc 840

ctctacaagt agcaagcaag gagataatga gaaaatcctc cccccgaggg ggggagcaaa 900

gagtctctgg tggttgcctc agagctgggc tttcccttcc ttgaggcttt gcagcgtgga 960

agggactatc cgctagacta tgagattgag tctgtgtgt 999

<210> 26
<211> 1000
<212> DNA
<213> Artificial

<220>
<223> Fragment of MYLPF1 regulatory element

<400> 26
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ccttagatca caagcataaa gacctgacgt tatgagctcc aaccttccaa cttctaaacg 180

ccctcttctt tctctgaccc ccatattctg atttccatat agcatccacc atcctggaat 240

tccagtgaga cctagctccc gacttctcag ctcctccttg gtttctgagt cctctaaggt 300

ccctcactcc caactcagcc ccatgtcctg tcaattccca ctcagtgtct gatctccttc 360

tcctcacctt tcccatctcc cgtttgaccc aagcttcctg agctctcctc ccattccct 420

ttttggagtc ctcctcctct cccagaaccc agtaataagt gggctcctcc ctggcctgga 480

cccccgtggt aaccctataa ggcgaggcag ctgctgtctg aggcagggag gggctggtgt 540

gggaggctaa gggcagctgc taagtttagg gtggctcctt ctctcttctt agagacaaca 600

ggtggctggg gcctcagtgc ccagaaaaga aaatgtctta gaggtatcgg catgggcctg 660

gaggaggggg gacagggcag ggggaggcat cttcctcagg acatcgggtc ctagagggag 720

cgggaggaga aggagatggt tgtccttgcc aacttggggc ttcctcagcc actatttttc 780

cagacttctg ctgcatggag gggactgggt cactgaggcc cagagggaga agagagggta 840

catcaaagtc acacaatcag ccaagctggc tcttggccag aataaagtga gctgccactg 900

gctatcaagg cacctcacag aaagtgacca gctggctgtc cttttagggt cttttcctcc 960

cctcttgagt tccagcctcc acaccagtac ccagagaaaa 1000

<210> 27
<211> 999
<212> DNA
<213> Artificial

<220>
<223> Fragment of MYH1 regulatory element

<400> 27
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accacatatt atgtctctac aaacactatt gcagttcctc ctgcctcctg ggaaaaaagt 120

gaaatatgct tggctcaaga tattcacttc tcatacagaa gatccttgac atttggaata 180

taattgagtc ctgagactcc ctctgcaggg tcctgtcgcc atataataga gggactacta 240

aaagcaacag tattaaagct cagactagga ataaatcaca tatcctcaat ccctggacaa 300

cttgtttact tctagtgtta gtttttttctt aaaaaaaaaa ttgaaatcat tctgaggctg 360

gaatactttg gacatgccca gcagttcctg gcagttccca cagaagcatt acctcatgac 420

tggagtgggt aaagcatact gtgggctatg gataagactg acattaacca caagcatgtt 480

tggcagcaga ctggtgcttt acaagctcca tgttcagcag gagctgcaaa gtgttcctcc 540

aaaccaatat ttgtcattct tggattctat ttaggaggtc ctgttactca catgtttcaa 600

tatcagcaga agccagtttc cctgtggtac cgaagtggat cctgatgaat ttacccttgt 660

aagtaaaaaa aatgatgtta tacccaaagc ttgaagtacg tagtggggat gccactgaaa 720

taattcagac atgctttctc tggcatctaa aggcagagaa gacccttttgg caaccaagag 780

acttacaaag cgagaggagt tgtcattcct cacggtcttg gcgttgccaa aggcctccag 840

taggggttg gcactgatga tttgatcttc cagagtcccc tgcaaaggca agagcagtcc 900

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aacaatcaga ctcacctgca ttttgccaga agtaacttc 999

<210> 28
<211> 1000
<212> DNA
<213> Artificial

<220>
<223> Fragment of TPM3 regulatory element

<400> 28
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cgatccagag cattctcctt gtctaacttc agcatctgca tctttttctt gatggcctcc 120

atcatgagca gtggctgttg gtaggctcac ctgtgaacac tggagaactg gagactgggg 180

caagaaagaa ggggctgctg cctgagtgac caggaggtcc ccagacttga gtctttatct 240

gtgctcatag ctccaccttt tgttcctaat atggtctttc cagctccctc caccccatca 300

ttgttctcct gggggaacac agggtgagac gctttgatga actgacatca ccagcaaaaa 360

aaatatctag caacagctga ggctgatttt agacaatgga aagtggggga gggaagaggt 420

tctccctgac cctgaaactt tccactcatt ctgggcagct ctatggatgt tttaaaagaa 480

gaggaagagg ggagggaaga acattgaaat agagaagtgt actttggcaa ttctaggttg 540

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ctgtgttgaa tgctggtcaa actccgttag ttgagtttta gcttttgatt cctggtattc 660

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tccccagatc aaattgctgt gctattctgg gagtctccga ttggcaggga gacgtttttc 780

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cttgaaggct atcccagagc ttcaagtggg gtggggagag aaacagggga gggtcagaac 900

aatccagaca ggatcatacc ctttgttttc ccacagtaat cttaaaatag aactgttgta 960

cccacacaga ctttggtctg tgtggctctc tcctcttctt 1000

<210> 29
<211> 999
<212> DNA
<213> Artificial

<220>
<223> Fragment of ANKRD2 regulatory element

<400> 29
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ctcccctggt gtcctcatga gtcctcagga aaagccactc tttgcttttc tttaaagcag 120

agccatgctg cctgccctgc ctcctccatc agttgctggg aggattaagc aggaagacag 180

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cgctagctgg gcttagtgct ttccggagac ccctttcttg aagcaagact ctgtaagccc 780

tgcagaggtc ccctgagcac ttaccaagag aggagacaga ttggataagg tttgttcatg 840

actaaaagtc acccagccaa atgcagtgat gcttaacggg gaagcatgtg ggaccccgga 900

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cggccctggc ctggacaagt agagtgtgac cctcctcac 999

<210> 30
<211> 663
<212> DNA
<213> Artificial

<220>
<223> CMV promoter

<400> 30
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atggagttcc gcgttacata acttacggta aatggcccgc ctggctgacc gcccaacgac 120

ccccgcccat tgacgtcaat aatgacgtat gttcccatag taacgtcaat agggactttc 180

cattgacgtc aatgggtgga gtatttacgg taaactgccc acttggcagt acatcaagtg 240

tatcatatgc caagtacgcc ccctattgac gtcaatgacg gtaaatggcc cgcctggcat 300

tatgcccagt acatgacctt atgggacttt cctacttggc agtacatcta cgtattagtc 360

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cctggagacg ccatccacgc tgttttgacc tccatagaag acaccgggac cgatccagcc 660

tcc 663

<210> 31
<211> 20
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 31
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<210> 32
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<220>
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<400> 32
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<210> 33
<211> 20
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<213> Artificial Sequence

<220>
<223> primer

<400> 33
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<210> 34
<211> 23
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<220>
<223> primer

<400> 34
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<210> 35
<211> 20
<212> DNA
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<220>
<223> primer

<400> 35
tagctgggcc tttccttctc 20

<210> 36
<211> 20
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<213> Artificial Sequence

<220>
<223> primer

<400> 36
cgtctcccta gcagcaacag 20

<210> 37
<211> 171
<212> DNA
<213> Artificial Sequence

<220>
<223> Fragment a of skeletal muscle-specific regulatory element 4 (Sk-SH4a)

<400> 37
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atctccttct cctcaccttt cccatctccc gtttgaccca agcttcctga gctctcctcc 120

cattcccctt tttggagtcc tcctcctctc ccagaaccca gtaataagtg g 171

<210> 38
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Fragment b of skeletal muscle-specific regulatory element 4 (Sk-SH4b)

<400> 38
tggcctggac ccccgtggta accctataag gcgaggcagc tgctgtctga g 51

<210> 39
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
<223> Fragment c of skeletal muscle-specific regulatory element 4 (Sk-SH4c)

<400> 39
gcagggaggg gctggtgtgg gaggctaagg gcagctgcta agtttagggt ggctccttct 60

<210> 40
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Fragment d of skeletal muscle-specific regulatory element 4 (Sk-SH4d)

<400> 40
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<210> 41
<211> 120
<212> DNA
<213> Artificial Sequence

<220>
<223> Fragment e of skeletal muscle-specific regulatory element 4 (Sk-SH4e)

<400> 41
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ctcttcttag agacaacagg tggctggggc ctcagtgccc agaaaagaaa atgtcttaga 120

<210> 42
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 42
gtgccctact acatcaa 17

<210> 43
<211> 16
<212> DNA
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<220>
<223> primer

<400> 43
aggttgtgct ggtcca 16

<210> 44
<211> 8069
<212> DNA
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<220>
<223> AAVss-SkSH4-Des-MVM-MD1 plasmid construct

<400> 44
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gggcgacctt tggtcgcccg gcctcagtga gcgagcgagc gcgcagagag ggagtggcca 120

actccatcac taggggttcc tcgtacgttc tgagtcctct aaggtccctc actcccaact 180

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gcgacctgca ggatggcagg agactgctgg atctgctgga gggactgacc ggccagaagc 1860

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