32L4 – PpLuc(GC) – A64 - C30 - hSL (R2464)

(SEQ ID NO: 35):

GGGGCGCUGCCUACGGAGGUGGCAGCCAUCUCCUUCUCGGCAUCAAGCUUGAGGAUGGAG
GACGCCAAGAACAUCAAGAAGGGCCCGGCGCCCUUCUACCCGCUGGAGGACGGGACCGCC
GGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCUGGUGCCGGGCACGAUCGCCUUC
ACCGACGCCCACAUCGAGGUCGACAUCACCUACGCGGAGUACUUCGAGAUGAGCGUGCGC
CUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAACCACCGGAUCGUGGUGUGCUCG
GAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGCCCUCUUCAUCGGCGUGGCCGUC
GCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCUGAACAGCAUGGGGAUCAGCCAG
CCGACCGUGGUGUUCGUGAGCAAGAAGGGCCUGCAGAAGAUCCUGAACGUGCAGAAGAAG
CUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAAGACCGACUACCAGGGCUUCCAG
UCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGGCUUCAACGAGUACGACUUCGUC
CCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAUCAUGAACAGCAGCGGCAGCACC
GGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGCCUGCGUGCGCUUCUCGCACGCC
CGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACACCGCCAUCCUGAGCGUGGUGCCG
UUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUACCUCAUCUGCGGCUUCCGGGUG
GUCCUGAUGUACCGGUUCGAGGAGGAGCUGUUCCUGCGGAGCCUGCAGGACUACAAGAUC
CAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUUCGCCAAGAGCACCCUGAUCGAC
AAGUACGACCUGUCGAACCUGCACGAGAUCGCCAGCGGGGGCGCCCCGCUGAGCAAGGAG
GUGGGCGAGGCCGUGGCCAAGCGGUUCCACCUCCCGGGCAUCCGCCAGGGCUACGGCCUG
ACCGAGACCACGAGCGCGAUCCUGAUCACCCCCGAGGGGGACGACAAGCCGGGCGCCGUG
GGCAAGGUGGUCCCGUUCUUCGAGGCCAAGGUGGUGGACCUGGACACCGGCAAGACCCUG
GGCGUGAACCAGCGGGGCGAGCUGUGCGUGCGGGGGCCGAUGAUCAUGAGCGGCUACGUG
AACAACCCGGAGGCCACCAACGCCCUCAUCGACAAGGACGGCUGGCUGCACAGCGGCGAC
AUCGCCUACUGGGACGAGGACGAGCACUUCUUCAUCGUCGACCGGCUGAAGUCGCUGAUC
AAGUACAAGGGCUACCAGGUGGCGCCGGCCGAGCUGGAGAGCAUCCUGCUCCAGCACCCC
AACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGACGACGCCGGCGAGCUGCCGGCC
GCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGAGAAGGAGAUCGUCGACUACGUG
GCCAGCCAGGUGACCACCGCCAAGAAGCUGCGGGGCGGCGUGGUGUUCGUGGACGAGGUC
CCGAAGGGCCUGACCGGGAAGCUCGACGCCCGGAAGAUCCGCGAGAUCCUGAUCAAGGCC
AAGAAGGGCGGCAAGAUCGCCGUGUAAGACUAGUAGAUCUAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAUGCAUCCCCCCCCCCC
CCCCCCCCCCCCCCCCCCCCCAAAGGCUCUUUUCAGAGCCACCAGAAUU

Fig. 1

32L4 – PpLuc(GC) – gnas-A64-C30-hSL (R3089)

(SEQ ID NO: 36):

GGGGCGCUGCCUACGGAGGUGGCAGCCAUCUCCUUCUCGGCAUCAAGCUUGAGGAUGGAG
GACGCCAAGAACAUCAAGAAGGGCCCGGCGCCCUUCUACCCGCUGGAGGACGGGACCGCC
GGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCUGGUGCCGGGCACGAUCGCCUUC
ACCGACGCCCACAUCGAGGUCGACAUCACCUACGCGGAGUACUUCGAGAUGAGCGUGCGC
CUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAACCACCGGAUCGUGGUGUGCUCG
GAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGCCCUCUUCAUCGGCGUGGCCGUC
GCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCUGAACAGCAUGGGGAUCAGCCAG
CCGACCGUGGUGUUCGUGAGCAAGAAGGGCCUGCAGAAGAUCCUGAACGUGCAGAAGAAG
CUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAAGACCGACUACCAGGGCUUCCAG
UCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGGCUUCAACGAGUACGACUUCGUC
CCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAUCAUGAACAGCAGCGGCAGCACC
GGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGCCUGCGUGCGCUUCUCGCACGCC
CGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACACCGCCAUCCUGAGCGUGGUGCCG
UUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUACCUCAUCUGCGGCUUCCGGGUG
GUCCUGAUGUACCGGUUCGAGGAGGAGCUGUUCCUGCGGAGCCUGCAGGACUACAAGAUC
CAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUUCGCCAAGAGCACCCUGAUCGAC
AAGUACGACCUGUCGAACCUGCACGAGAUCGCCAGCGGGGGCGCCCCGCUGAGCAAGGAG
GUGGGCGAGGCCGUGGCCAAGCGGUUCCACCUCCCGGGCAUCCGCCAGGGCUACGGCCUG
ACCGAGACCACGAGCGCGAUCCUGAUCACCCCCGAGGGGGACGACAAGCCGGGCGCCGUG
GGCAAGGUGGUCCCGUUCUUCGAGGCCAAGGUGGUGGACCUGGACACCGGCAAGACCCUG
GGCGUGAACCAGCGGGGCGAGCUGUGCGUGCGGGGGCCGAUGAUCAUGAGCGGCUACGUG
AACAACCCGGAGGCCACCAACGCCCUCAUCGACAAGGACGGCUGGCUGCACAGCGGCGAC
AUCGCCUACUGGGACGAGGACGAGCACUUCUUCAUCGUCGACCGGCUGAAGUCGCUGAUC
AAGUACAAGGGCUACCAGGUGGCGCCGGCCGAGCUGGAGAGCAUCCUGCUCCAGCACCCC
AACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGACGACGCCGGCGAGCUGCCGGCC
GCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGAGAAGGAGAUCGUCGACUACGUG
GCCAGCCAGGUGACCACCGCCAAGAAGCUGCGGGGCGGCGUGGUGUUCGUGGACGAGGUC
CCGAAGGGCCUGACCGGGAAGCUCGACGCCCGGAAGAUCCGCGAGAUCCUGAUCAAGGCC
AAGAAGGGCGGCAAGAUCGCCGUGUAAGACUAGUGAAGGGAACACCCAAAUUUAAUUCAG
CCUUAAGCACAAUUAAUUAAGAGUGAAACGUAAUUGUACAAGCAGUUGGUCACCCACCAU
AGGGCAUGAUCAACACCGCAACCUUUCCUUUUUCCCCCAGUGAUUCUGAAAAACCCCUCU
UCCCUUCAGCUUGCUUAGAUGUUCCAAAUUUAGUAAGCUUAAGGCGGCCUACAGAAGAAA
AAGAAAAAAAAAGGCCACAAAAGUUCCCUCUCACUUUCAGUAAAUAAAAUAAAAGCAGCAA
CAGAAAUAAAGAAAUAAAUGAAAUUCAAAAUGAAAUAAAUAUUGUGUUGUGCAGCAUUAA
AAAAUCAAUAAAAAUUAAAAAUGAGCAAGAUCUAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAUGCAUCCCCCCCCCCCCCCCCCC
CCCCCCCCCCCCCAAAGGCUCUUUUCAGAGCCACCAGAAUU

Fig. 2

32L4 - PpLuc(GC) – morn2– A64 - C30 - hSL (R3106)

(SEQ ID NO: 37):

GGGGCGCUGCCUACGGAGGUGGCAGCCAUCUCCUUCUCGGCAUCAAGCUUGAGG*AUGGAG*
GACGCCAAGAACAUCAAGAAGGGCCCGGCGCCCUUCUACCCGCUGGAGGACGGGACCGCC
GGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCUGGUGCCGGGCACGAUCGCCUUC
ACCGACGCCCACAUCGAGGUCGACAUCACCUACGCGGAGUACUUCGAGAUGAGCGUGCGC
CUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAACCACCGGAUCGUGGUGUGCUCG
GAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGCCCUCUUCAUCGGCGUGGCCGUC
GCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCUGAACAGCAUGGGGAUCAGCCAG
CCGACCGUGGUGUUCGUGAGCAAGAAGGGCCUGCAGAAGAUCCUGAACGUGCAGAAGAAG
CUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAAGACCGACUACCAGGGCUUCCAG
UCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGGCUUCAACGAGUACGACUUCGUC
CCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAUCAUGAACAGCAGCGGCAGCACC
GGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGCCUGCGUGCGCUUCUCGCACGCC
CGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACACCGCCAUCCUGAGCGUGGUGCCG
UUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUACCUCAUCUGCGGCUUCCGGGUG
GUCCUGAUGUACCGGUUCGAGGAGGAGCUGUUCCUGCGGAGCCUGCAGGACUACAAGAUC
CAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUUCGCCAAGAGCACCCUGAUCGAC
AAGUACGACCUGUCGAACCUGCACGAGAUCGCCAGCGGGGGCGCCCCGCUGAGCAAGGAG
GUGGGCGAGGCCGUGGCCAAGCGGUUCCACCUCCCGGGCAUCCGCCAGGGCUACGGCCUG
ACCGAGACCACGAGCGCGAUCCUGAUCACCCCCGAGGGGGACGACAAGCCGGGCGCCGUG
GGCAAGGUGGUCCCGUUCUUCGAGGCCAAGGUGGUGGACCUGGACACCGGCAAGACCCUG
GGCGUGAACCAGCGGGGCGAGCUGUGCGUGCGGGGGCCGAUGAUCAUGAGCGGCUACGUG
AACAACCCGGAGGCCACCAACGCCCUCAUCGACAAGGACGGCUGGCUGCACAGCGGCGAC
AUCGCCUACUGGGACGAGGACGAGCACUUCUUCAUCGUCGACCGGCUGAAGUCGCUGAUC
AAGUACAAGGGCUACCAGGUGGCGCCGGCCGAGCUGGAGAGCAUCCUGCUCCAGCACCCC
AACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGACGACGCCGGCGAGCUGCCGGCC
GCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGAGAAGGAGAUCGUCGACUACGUG
GCCAGCCAGGUGACCACCGCCAAGAAGCUGCGGGGCGGCGUGGUGUUCGUGGACGAGGUC
CCGAAGGGCCUGACCGGGAAGCUCGACGCCCGGAAGAUCCGCGAGAUCCUGAUCAAGGCC
*AAGAAGGGCGGCAAGAUCGCCGUGUAA*GACUAGUACCUGCUGCCUUAACGCUGAGAUGUG
GCCUCUGCAACCCCCCUUAGGCAAAGCAACUGAACCUUCUGCUAAAGUGACCUGCCCUCU
UCCGUAAGUCCAAUAAAGUUGUCAUGCACCCAGAUCUAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAUGCAUCCCCCCCCCCCCCC
CCCCCCCCCCCCCCCCCCAAAGGCUCUUUUCAGAGCCACCAGAAUU

Fig. 3

32L4 - PpLuc(GC) – gstm1– A64 - C30 - hSL (R3107)

(SEQ ID NO: 38):

GGGGCGCUGCCUACGGAGGUGGCAGCCAUCUCCUUCUCGGCAUCAAGCUUGAGG*AUGGAG*
GACGCCAAGAACAUCAAGAAGGGCCCGGCGCCCUUCUACCCGCUGGAGGACGGGACCGCC
GGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCUGGUGCCGGGCACGAUCGCCUUC
ACCGACGCCCACAUCGAGGUCGACAUCACCUACGCGGAGUACUUCGAGAUGAGCGUGCGC
CUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAACCACCGGAUCGUGGUGUGCUCG
GAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGCCCUCUUCAUCGGCGUGGCCGUC
GCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCUGAACAGCAUGGGGAUCAGCCAG
CCGACCGUGGUGUUCGUGAGCAAGAAGGGCCUGCAGAAGAUCCUGAACGUGCAGAAGAAG
CUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAAGACCGACUACCAGGGCUUCCAG
UCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGGCUUCAACGAGUACGACUUCGUC
CCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAUCAUGAACAGCAGCGGCAGCACC
GGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGCCUGCGUGCGCUUCUCGCACGCC
CGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACACCGCCAUCCUGAGCGUGGUGCCG
UUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUACCUCAUCUGCGGCUUCCGGGUG
GUCCUGAUGUACCGGUUCGAGGAGGAGCUGUUCCUGCGGAGCCUGCAGGACUACAAGAUC
CAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUUCGCCAAGAGCACCCUGAUCGAC
AAGUACGACCUGUCGAACCUGCACGAGAUCGCCAGCGGGGGCGCCCCGCUGAGCAAGGAG
GUGGGCGAGGCCGUGGCCAAGCGGUUCCACCUCCCGGGCAUCCGCCAGGGCUACGGCCUG
ACCGAGACCACGAGCGCGAUCCUGAUCACCCCCGAGGGGGACGACAAGCCGGGCGCCGUG
GGCAAGGUGGUCCCGUUCUUCGAGGCCAAGGUGGUGGACCUGGACACCGGCAAGACCCUG
GGCGUGAACCAGCGGGGCGAGCUGUGCGUGCGGGGGCCGAUGAUCAUGAGCGGCUACGUG
AACAACCCGGAGGCCACCAACGCCCUCAUCGACAAGGACGGCUGGCUGCACAGCGGCGAC
AUCGCCUACUGGGACGAGGACGAGCACUUCUUCAUCGUCGACCGGCUGAAGUCGCUGAUC
AAGUACAAGGGCUACCAGGUGGCGCCGGCCGAGCUGGAGAGCAUCCUGCUCCAGCACCCC
AACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGACGACGCCGGCGAGCUGCCGGCC
GCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGAGAAGGAGAUCGUCGACUACGUG
GCCAGCCAGGUGACCACCGCCAAGAAGCUGCGGGGCGGCGUGGUGUUCGUGGACGAGGUC
CCGAAGGGCCUGACCGGGAAGCUCGACGCCCGGAAGAUCCGCGAGAUCCUGAUCAAGGCC
*AAGAAGGGCGGCAAGAUCGCCGUGUAA*GACUAGUGCCCUUGCUACACGGGCACUCACUAG
GAGGACCUGUCCACACUGGGGAUCCUGCAGGCCCUGGGUGGGGACAGCACCCUGGCCUUC
UGCACUGUGGCUCCUGGUUCUCUCCCUUCCCGCUCCCUUCUGCAGCUUGGUCAGCCCCA
UCUCCUCACCCUCUUCCCAGUCAAGUCCACACAGCCUUCAUUCUCCCCAGUUUCUUUCAC
AUGGCCCCUUCUUCAUUGGCUCCCUGACCCAACCUCACAGCCCGUUUCUGCGAACUGAGG
UCUGUCCUGAACUCACGCUUCCUAGAAUUACCCCGAUGGUCAACACUAUCUUAGUGCUAG
CCCUCCCUAGAGUUACCCCGAAGGUCAAUACUUGAGUGCCAGCCUGUUCCUGGUGGAGUA
GCCUCCCCAGGUCUGUCUCGUCUACAAUAAAGUCUGAAACACACUUGCCAUGAGAUCUAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAUGCAUCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCAAAGGCUCUUUUCAGAGCCACC
AGAAUU

Fig. 4

32L4 - PpLuc(GC) – ndufa1 – A64 - C30 - hSL (R3108)

(SEQ ID NO: 39):

GGGGCGCUGCCUACGGAGGUGGCAGCCAUCUCCUUCUCGGCAUCAAGCUUGAGGAUGGAG
GACGCCAAGAACAUCAAGAAGGGCCCGGCGCCCUUCUACCCGCUGGAGGACGGGACCGCC
GGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCUGGUGCCGGGCACGAUCGCCUUC
ACCGACGCCCACAUCGAGGUCGACAUCACCUACGCGGAGUACUUCGAGAUGAGCGUGCGC
CUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAACCACCGGAUCGUGGUGUGCUCG
GAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGCCCUCUUCAUCGGCGUGGCCGUC
GCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCUGAACAGCAUGGGGAUCAGCCAG
CCGACCGUGGUGUUCGUGAGCAAGAAGGGCCUGCAGAAGAUCCUGAACGUGCAGAAGAAG
CUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAAGACCGACUACCAGGGCUUCCAG
UCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGGCUUCAACGAGUACGACUUCGUC
CCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAUCAUGAACAGCAGCGGCAGCACC
GGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGCCUGCGUGCGCUUCUCGCACGCC
CGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACACCGCCAUCCUGAGCGUGGUGCCG
UUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUACCUCAUCUGCGGCUUCCGGGUG
GUCCUGAUGUACCGGUUCGAGGAGGAGCUGUUCCUGCGGAGCCUGCAGGACUACAAGAUC
CAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUUCGCCAAGAGCACCCUGAUCGAC
AAGUACGACCUGUCGAACCUGCACGAGAUCGCCAGCGGGGGCGCCCCGCUGAGCAAGGAG
GUGGGCGAGGCCGUGGCCAAGCGGUUCCACCUCCCGGGCAUCCGCCAGGGCUACGGCCUG
ACCGAGACCACGAGCGCGAUCCUGAUCACCCCCGAGGGGGACGACAAGCCGGGCGCCGUG
GGCAAGGUGGUCCCGUUCUUCGAGGCCAAGGUGGUGGACCUGGACACCGGCAAGACCCUG
GGCGUGAACCAGCGGGGCGAGCUGUGCGUGCGGGGGCCGAUGAUCAUGAGCGGCUACGUG
AACAACCCGGAGGCCACCAACGCCCUCAUCGACAAGGACGGCUGGCUGCACAGCGGCGAC
AUCGCCUACUGGGACGAGGACGAGCACUUCUUCAUCGUCGACCGGCUGAAGUCGCUGAUC
AAGUACAAGGGCUACCAGGUGGCGCCGGCCGAGCUGGAGAGCAUCCUGCUCCAGCACCCC
AACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGACGACGCCGGCGAGCUGCCGGCC
GCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGAGAAGGAGAUCGUCGACUACGUG
GCCAGCCAGGUGACCACCGCCAAGAAGCUGCGGGGCGGCGUGGUGUUCGUGGACGAGGUC
CCGAAGGGCCUGACCGGGAAGCUCGACGCCCGGAAGAUCCGCGAGAUCCUGAUCAAGGCC
AAGAAGGGCGGCAAGAUCGCCGUGUAAGACUAGUGGAAGCAUUUUCCUGGCUGAUUAAAA
GAAAUUACUCAGCUAUGGUCAUCUGUUCCUGUUAGAAGGCUAUGCAGCAUAUUAUAUACU
AUGCGCAUGUUAUGAAAUGCAUAAUAAAAAAUUUUAAAAAAUCUAAAAGAUCUAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAUGC
AUCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCAAAGGCUCUUUUCAGAGCCACCAGAAU
U

Fig. 5

32L4 - PpLuc(GC) – cbr2 – A64 - C30 - hSL (R3109)

(SEQ ID NO: 40):

GGGGCGCUGCCUACGGAGGUGGCAGCCAUCUCCUUCUCGGCAUCAAGCUUGAGGAUGGAG
GACGCCAAGAACAUCAAGAAGGGCCCGGCGCCCUUCUACCCGCUGGAGGACGGGACCGCC
GGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCUGGUGCCGGGCACGAUCGCCUUC
ACCGACGCCCACAUCGAGGUCGACAUCACCUACGCGGAGUACUUCGAGAUGAGCGUGCGC
CUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAACCACCGGAUCGUGGUGUGCUCG
GAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGCCCUCUUCAUCGGCGUGGCCGUC
GCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCUGAACAGCAUGGGGAUCAGCCAG
CCGACCGUGGUGUUCGUGAGCAAGAAGGGCCUGCAGAAGAUCCUGAACGUGCAGAAGAAG
CUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAAGACCGACUACCAGGGCUUCCAG
UCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGGCUUCAACGAGUACGACUUCGUC
CCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAUCAUGAACAGCAGCGGCAGCACC
GGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGCCUGCGUGCGCUUCUCGCACGCC
CGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACACCGCCAUCCUGAGCGUGGUGCCG
UUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUACCUCAUCUGCGGCUUCCGGGUG
GUCCUGAUGUACCGGUUCGAGGAGGAGCUGUUCCUGCGGAGCCUGCAGGACUACAAGAUC
CAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUUCGCCAAGAGCACCCUGAUCGAC
AAGUACGACCUGUCGAACCUGCACGAGAUCGCCAGCGGGGGCGCCCCGCUGAGCAAGGAG
GUGGGCGAGGCCGUGGCCAAGCGGUUCCACCUCCCGGGCAUCCGCCAGGGCUACGGCCUG
ACCGAGACCACGAGCGCGAUCCUGAUCACCCCCGAGGGGGACGACAAGCCGGGCGCCGUG
GGCAAGGUGGUCCCGUUCUUCGAGGCCAAGGUGGUGGACCUGGACACCGGCAAGACCCUG
GGCGUGAACCAGCGGGGCGAGCUGUGCGUGCGGGGGCCGAUGAUCAUGAGCGGCUACGUG
AACAACCCGGAGGCCACCAACGCCCUCAUCGACAAGGACGGCUGGCUGCACAGCGGCGAC
AUCGCCUACUGGGACGAGGACGAGCACUUCUUCAUCGUCGACCGGCUGAAGUCGCUGAUC
AAGUACAAGGGCUACCAGGUGGCGCCGGCCGAGCUGGAGAGCAUCCUGCUCCAGCACCCC
AACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGACGACGCCGGCGAGCUGCCGGCC
GCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGAGAAGGAGAUCGUCGACUACGUG
GCCAGCCAGGUGACCACCGCCAAGAAGCUGCGGGGCGGCGUGGUGUUCGUGGACGAGGUC
CCGAAGGGCCUGACCGGGAAGCUCGACGCCCGGAAGAUCCGCGAGAUCCUGAUCAAGGCC
AAGAAGGGCGGCAAGAUCGCCGUGUAAGACUAGUUCUGCUCAGUUGCCGCGGACAUCUGA
GUGGCCUUCUUAGCCCCACCCUCAGCCAAAGCAUUUACUGAUCUCGUGACUCCGCCCUCA
UGCUACAGCCACGCCCACCACGCAGCUCACAGUUCCACCCCCAUGUUACUGUCGAUCCCA
CAACCACUCCAGGCGCAGACCUUGUUCUCUUUGUCCACUUUGUUGGGCUCAUUUGCCUAA
AUAAACGGGCCACCGCGUUACCUUUAACUAUAGAUCUAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAUGCAUCCCCCCCCCCCCC
CCCCCCCCCCCCCCCCCCAAAGGCUCUUUUCAGAGCCACCAGAAUU

Fig. 6

PpLuc(GC) - albumin7– A64 - C30 - hSL (R2463)

(SEQ ID NO: 41):

GGGAGAAAGCUUGAGGAUGGAGGACGCCAAGAACAUCAAGAAGGGCCCGGCGCCCUUCUA
CCCGCUGGAGGACGGGACCGCCGGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCU
GGUGCCGGGCACGAUCGCCUUCACCGACGCCCACAUCGAGGUCGACAUCACCUACGCGGA
GUACUUCGAGAUGAGCGUGCGCCUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAA
CCACCGGAUCGUGGUGUGCUCGGAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGC
CCUCUUCAUCGGCGUGGCCGUCGCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCU
GAACAGCAUGGGGAUCAGCCAGCCGACCGUGGUGUUCGUGAGCAAGAAGGGCCUGCAGAA
GAUCCUGAACGUGCAGAAGAAGCUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAA
GACCGACUACCAGGGCUUCCAGUCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGG
CUUCAACGAGUACGACUUCGUCCCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAU
CAUGAACAGCAGCGGCAGCACCGGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGC
CUGCGUGCGCUUCUCGCACGCCCGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACAC
CGCCAUCCUGAGCGUGGUGCCGUUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUA
CCUCAUCUGCGGCUUCCGGGUGGUCCUGAUGUACCGGUUCGAGGAGGAGCUGUUCCUGCG
GAGCCUGCAGGACUACAAGAUCCAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUU
CGCCAAGAGCACCCUGAUCGACAAGUACGACCUGUCGAACCUGCACGAGAUCGCCAGCGG
GGGCGCCCCGCUGAGCAAGGAGGUGGGCGAGGCCGUGGCCAAGCGGUUCCACCUCCCGGG
CAUCCGCCAGGGCUACGGCCUGACCGAGACCACGAGCGCGAUCCUGAUCACCCCCGAGGG
GGACGACAAGCCGGGCGCCGUGGGCAAGGUGGUCCCGUUCUUCGAGGCCAAGGUGGUGGA
CCUGGACACCGGCAAGACCCUGGGCGUGAACCAGCGGGGCGAGCUGUGCGUGCGGGGGCC
GAUGAUCAUGAGCGGCUACGUGAACAACCCGGAGGCCACCAACGCCCUCAUCGACAAGGA
CGGCUGGCUGCACAGCGGCGACAUCGCCUACUGGGACGAGGACGAGCACUUCUUCAUCGU
CGACCGGCUGAAGUCGCUGAUCAAGUACAAGGGCUACCAGGUGGCGCCGGCCGAGCUGGA
GAGCAUCCUGCUCCAGCACCCCAACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGA
CGACGCCGGCGAGCUGCCGGCCGCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGA
GAAGGAGAUCGUCGACUACGUGGCCAGCCAGGUGACCACCGCCAAGAAGCUGCGGGGCGG
CGUGGUGUUCGUGGACGAGGUCCCGAAGGGCCUGACCGGGAAGCUCGACGCCCGGAAGAU
CCGCGAGAUCCUGAUCAAGGCCAAGAAGGGCGGCAAGAUCGCCGUGUAAGACUAGUGCAU
CACAUUUAAAAGCAUCUCAGCCUACCAUGAGAAUAAGAGAAAGAAAAUGAAGAUCAAUAG
CUUAUUCAUCUCUUUUUCUUUUUCGUUGGUGUAAAGCCAACACCCUGUCUAAAAAACAUA
AAUUUCUUUAAUCAUUUUGCCUCUUUUCUCUGUGCUUCAAUUAAUAAAAAAUGGAAAGAA
CCUAGAUCUAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAUGCAUCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCAAAGGCUCUUU
UCAGAGCCACCAGAAUU

Fig. 7

Mp68 - PpLuc(GC) - albumin7– A64 - C30 - hSL (R3111)

(SEQ ID NO: 42):

GGGCUUUCCCAUUCUGUAGCAGAAUUUGGUGUUGCCUGUGGUCUUGGUCCCGCGGAGAAG
CUUGAGGAUGGAGGACGCCAAGAACAUCAAGAAGGGCCCGGCGCCCUUCUACCCGCUGGA
GGACGGGACCGCCGGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCUGGUGCCGGG
CACGAUCGCCUUCACCGACGCCCACAUCGAGGUCGACAUCACCUACGCGGAGUACUUCGA
GAUGAGCGUGCGCCUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAACCACCGGAU
CGUGGUGUGCUCGGAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGCCCUCUUCAU
CGGCGUGGCCGUCGCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCUGAACAGCAU
GGGGAUCAGCCAGCCGACCGUGGUGUUCGUGAGCAAGAAGGGCCUGCAGAAGAUCCUGAA
CGUGCAGAAGAAGCUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAAGACCGACUA
CCAGGGCUUCCAGUCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGGCUUCAACGA
GUACGACUUCGUCCCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAUCAUGAACAG
CAGCGGCAGCACCGGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGCCUGCGUGCG
CUUCUCGCACGCCCGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACACCGCCAUCCU
GAGCGUGGUGCCGUUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUACCUCAUCUG
CGGCUUCCGGGUGGUCCUGAUGUACCGGUUCGAGGAGGAGCUGUUCCUGCGGAGCCUGCA
GGACUACAAGAUCCAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUUCGCCAAGAG
CACCCUGAUCGACAAGUACGACCUGUCGAACCUGCACGAGAUCGCCAGCGGGGGCGCCCC
GCUGAGCAAGGAGGUGGGCGAGGCCGUGGCCAAGCGGUUCCACCUCCCGGGCAUCCGCCA
GGGCUACGGCCUGACCGAGACCACGAGCGCGAUCCUGAUCACCCCCGAGGGGGACGACAA
GCCGGGCGCCGUGGGCAAGGUGGUCCCGUUCUUCGAGGCCAAGGUGGUGGACCUGGACAC
CGGCAAGACCCUGGGCGUGAACCAGCGGGGCGAGCUGUGCGUGCGGGGGCCGAUGAUCAU
GAGCGGCUACGUGAACAACCCGGAGGCCACCAACGCCCUCAUCGACAAGGACGGCUGGCU
GCACAGCGGCGACAUCGCCUACUGGGACGAGGACGAGCACUUCUUCAUCGUCGACCGGCU
GAAGUCGCUGAUCAAGUACAAGGGCUACCAGGUGGCGCCGGCCGAGCUGGAGAGCAUCCU
GCUCCAGCACCCCAACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGACGACGCCGG
CGAGCUGCCGGCCGCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGAGAAGGAGAU
CGUCGACUACGUGGCCAGCCAGGUGACCACCGCCAAGAAGCUGCGGGGCGGCGUGGUGUU
CGUGGACGAGGUCCCGAAGGGCCUGACCGGGAAGCUCGACGCCCGGAAGAUCCGCGAGAU
CCUGAUCAAGGCCAAGAAGGGCGGCAAGAUCGCCGUGUAAGACUAGUGCAUCACAUUUAA
AAGCAUCUCAGCCUACCAUGAGAAUAAGAGAAAGAAAAUGAAGAUCAAUAGCUUAUUCAU
CUCUUUUUCUUUUUCGUUGGUGUAAAGCCAACACCCUGUCUAAAAAACAUAAAUUUCUUU
AAUCAUUUUGCCUCUUUUCUCUGUGCUUCAAUUAAUAAAAAAUGGAAAGAACCUAGAUCU
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAUGCAUCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCAAAGGCUCUUUUCAGAGCCA
CCAGAAUU

Fig. 8

Ndufa4 - PpLuc(GC) - albumin7– A64 - C30 - hSL (R3112)

(SEQ ID NO: 43):

GGGGUCCGCUCAGCCAGGUUGCAGAAGCGGCUUAGCGUGUGUCCUAAUCUUCUCUCUGCG
UGUAGGUAGGCCUGUGCCGCAAACAAGCUUGAGG*AUGGAGGACGCCAAGAACAUCAAGAA*
GGGCCCGGCGCCCUUCUACCCGCUGGAGGACGGGACCGCCGGCGAGCAGCUCCACAAGGC
CAUGAAGCGGUACGCCCUGGUGCCGGGCACGAUCGCCUUCACCGACGCCCACAUCGAGGU
CGACAUCACCUACGCGGAGUACUUCGAGAUGAGCGUGCGCCUGGCCGAGGCCAUGAAGCG
GUACGGCCUGAACACCAACCACCGGAUCGUGGUGUGCUCGGAGAACAGCCUGCAGUUCUU
CAUGCCGGUGCUGGGCGCCCUCUUCAUCGGCGUGGCCGUCGCCCCGGCGAACGACAUCUA
CAACGAGCGGGAGCUGCUGAACAGCAUGGGGAUCAGCCAGCCGACCGUGGUGUUCGUGAG
CAAGAAGGGCCUGCAGAAGAUCCUGAACGUGCAGAAGAAGCUGCCCAUCAUCCAGAAGAU
CAUCAUCAUGGACAGCAAGACCGACUACCAGGGCUUCCAGUCGAUGUACACGUUCGUGAC
CAGCCACCUCCCGCCGGGCUUCAACGAGUACGACUUCGUCCCGGAGAGCUUCGACCGGGA
CAAGACCAUCGCCCUGAUCAUGAACAGCAGCGGCAGCACCGGCCUGCCGAAGGGGUGGC
CCUGCCGCACCGGACCGCCUGCGUGCGCUUCUCGCACGCCCGGGACCCCAUCUUCGGCAA
CCAGAUCAUCCCGGACACCGCCAUCCUGAGCGUGGUGCCGUUCCACCACGGCUUCGGCAU
GUUCACGACCCUGGGCUACCUCAUCUGCGGCUUCCGGGUGGUCCUGAUGUACCGGUUCGA
GGAGGAGCUGUUCCUGCGGAGCCUGCAGGACUACAAGAUCCAGAGCGCGCUGCUCGUGCC
GACCCUGUUCAGCUUCUUCGCCAAGAGCACCCUGAUCGACAAGUACGACCUGUCGAACCU
GCACGAGAUCGCCAGCGGGGGCGCCCCGCUGAGCAAGGAGGUGGGCGAGGCCGUGGCCAA
GCGGUUCCACCUCCCGGGCAUCCGCCAGGGCUACGGCCUGACCGAGACCACGAGCGCGAU
CCUGAUCACCCCCGAGGGGGACGACAAGCCGGGCGCCGUGGGCAAGGUGGUCCCGUUCUU
CGAGGCCAAGGUGGUGGACCUGGACACCGGCAAGACCCUGGGCGUGAACCAGCGGGGCGA
GCUGUGCGUGCGGGGGCCGAUGAUCAUGAGCGGCUACGUGAACAACCCGGAGGCCACCAA
CGCCCUCAUCGACAAGGACGGCUGGCUGCACAGCGGCGACAUCGCCUACUGGGACGAGGA
CGAGCACUUCUUCAUCGUCGACCGGCUGAAGUCGCUGAUCAAGUACAAGGGCUACCAGGU
GGCGCCGGCCGAGCUGGAGAGCAUCCUGCUCCAGCACCCCAACAUCUUCGACGCCGGCGU
GGCCGGGCUGCCGGACGACGACGCCGGCGAGCUGCCGGCCGCGGUGGUGGUGCUGGAGCA
CGGCAAGACCAUGACGGAGAAGGAGAUCGUCGACUACGUGGCCAGCCAGGUGACCACCGC
CAAGAAGCUGCGGGGCGGCGUGGUGUUCGUGGACGAGGUCCCGAAGGGCCUGACCGGGAA
GCUCGACGCCCGGAAGAUCCGCGAGAUCCUGAUCAAGGCCAAGAAGGGCGGCAAGAUCGC
*CGUGUAA*GACUAGUGCAUCACAUUUAAAAGCAUCUCAGCCUACCAUGAGAAUAAGAGAAA
GAAAAUGAAGAUCAAUAGCUUAUUCAUCUCUUUUUCUUUUUCGUUGGUGUAAAGCCAACA
CCCUGUCUAAAAAACAUAAAUUUCUUUAAUCAUUUUGCCUCUUUUCUCUGUGCUUCAAUU
AAUAAAAAAUGGAAAGAACCUAGAUCUAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAUGCAUCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCCCAAAGGCUCUUUUCAGAGCCACCAGAAUU

Fig. 9

PpLuc(GC) – A64 - C30 - hSL (R2462)

(SEQ ID NO: 44):

GGGAGAAAGCTTGAGGATGGAGGACGCCAAGAACATCAAGAAGGGCCCGGCGCCCTTCTA
CCCGCTGGAGGACGGGACCGCCGGCGAGCAGCTCCACAAGGCCATGAAGCGGTACGCCCT
GGTGCCGGGCACGATCGCCTTCACCGACGCCCACATCGAGGTCGACATCACCTACGCGGA
GTACTTCGAGATGAGCGTGCGCCTGGCCGAGGCCATGAAGCGGTACGGCCTGAACACCAA
CCACCGGATCGTGGTGTGCTCGGAGAACAGCCTGCAGTTCTTCATGCCGGTGCTGGGCGC
CCTCTTCATCGGCGTGGCCGTCGCCCCGGCGAACGACATCTACAACGAGCGGGAGCTGCT
GAACAGCATGGGGATCAGCCAGCCGACCGTGGTGTTCGTGAGCAAGAAGGGCCTGCAGAA
GATCCTGAACGTGCAGAAGAAGCTGCCCATCATCCAGAAGATCATCATCATGGACAGCAA
GACCGACTACCAGGGCTTCCAGTCGATGTACACGTTCGTGACCAGCCACCTCCCGCCGGG
CTTCAACGAGTACGACTTCGTCCCGGAGAGCTTCGACCGGGACAAGACCATCGCCCTGAT
CATGAACAGCAGCGGCAGCACCGGCCTGCCGAAGGGGGTGGCCCTGCCGCACCGGACCGC
CTGCGTGCGCTTCTCGCACGCCCGGGACCCCATCTTCGGCAACCAGATCATCCCGGACAC
CGCCATCCTGAGCGTGGTGCCGTTCCACCACGGCTTCGGCATGTTCACGACCCTGGGCTA
CCTCATCTGCGGCTTCCGGGTGGTCCTGATGTACCGGTTCGAGGAGGAGCTGTTCCTGCG
GAGCCTGCAGGACTACAAGATCCAGAGCGCGCTGCTCGTGCCGACCCTGTTCAGCTTCTT
CGCCAAGAGCACCCTGATCGACAAGTACGACCTGTCGAACCTGCACGAGATCGCCAGCGG
GGGCGCCCCGCTGAGCAAGGAGGTGGGCGAGGCCGTGGCCAAGCGGTTCCACCTCCCGGG
CATCCGCCAGGGCTACGGCCTGACCGAGACCACGAGCGCGATCCTGATCACCCCCGAGGG
GGACGACAAGCCGGGCGCCGTGGGCAAGGTGGTCCCGTTCTTCGAGGCCAAGGTGGTGGA
CCTGGACACCGGCAAGACCCTGGGCGTGAACCAGCGGGGCGAGCTGTGCGTGCGGGGGCC
GATGATCATGAGCGGCTACGTGAACAACCCGGAGGCCACCAACGCCCTCATCGACAAGGA
CGGCTGGCTGCACAGCGGCGACATCGCCTACTGGGACGAGGACGAGCACTTCTTCATCGT
CGACCGGCTGAAGTCGCTGATCAAGTACAAGGGCTACCAGGTGGCGCCGGCCGAGCTGGA
GAGCATCCTGCTCCAGCACCCCAACATCTTCGACGCCGGCGTGGCCGGGCTGCCGGACGA
CGACGCCGGCGAGCTGCCGGCCGCGGTGGTGGTGCTGGAGCACGGCAAGACCATGACGGA
GAAGGAGATCGTCGACTACGTGGCCAGCCAGGTGACCACCGCCAAGAAGCTGCGGGGCGG
CGTGGTGTTCGTGGACGAGGTCCCGAAGGGCCTGACCGGGAAGCTCGACGCCCGGAAGAT
CCGCGAGATCCTGATCAAGGCCAAGAAGGGCGGCAAGATCGCCGTGTAAGACTAGTAGAT
CTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAATGCATCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCAAAGGCTCTTTTCAGAGC
CACCAGAATT

Fig. 10

PpLuc(GC) – gnas- A64 - C30 – hSL (R3116)
(SEQ ID NO: 45):

GGGAGAAAGCUUGAGG*AUGGAGGACGCCAAGAACAUCAAGAAGGGCCCGGCGCCCUUCUA*
CCCGCUGGAGGACGGGACCGCCGGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCU
GGUGCCGGGCACGAUCGCCUUCACCGACGCCCACAUCGAGGUCGACAUCACCUACGCGGA
GUACUUCGAGAUGAGCGUGCGCCUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAA
CCACCGGAUCGUGGUGUGCUCGGAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGC
CCUCUUCAUCGGCGUGGCCGUCGCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCU
GAACAGCAUGGGGAUCAGCCAGCCGACCGUGGUGUUCGUGAGCAAGAAGGGCCUGCAGAA
GAUCCUGAACGUGCAGAAGAAGCUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAA
GACCGACUACCAGGGCUUCCAGUCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGG
CUUCAACGAGUACGACUUCGUCCCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAU
CAUGAACAGCAGCGGCAGCACCGGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGC
CUGCGUGCGCUUCUCGCACGCCCGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACAC
CGCCAUCCUGAGCGUGGUGCCGUUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUA
CCUCAUCUGCGGCUUCCGGGUGGUCCUGAUGUACCGGUUCGAGGAGGAGCUGUUCCUGCG
GAGCCUGCAGGACUACAAGAUCCAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUU
CGCCAAGAGCACCCUGAUCGACAAGUACGACCUGUCGAACCUGCACGAGAUCGCCAGCGG
GGGCGCCCCGCUGAGCAAGGAGGUGGGCGAGGCCGUGGCCAAGCGGUUCCACCUCCCGGG
CAUCCGCCAGGGCUACGGCCUGACCGAGACCACGAGCGCGAUCCUGAUCACCCCCGAGGG
GGACGACAAGCCGGGCGCCGUGGGCAAGGUGGUCCCGUUCUUCGAGGCCAAGGUGGUGGA
CCUGGACACCGGCAAGACCCUGGGCGUGAACCAGCGGGGCGAGCUGUGCGUGCGGGGGCC
GAUGAUCAUGAGCGGCUACGUGAACAACCCGGAGGCCACCAACGCCCUCAUCGACAAGGA
CGGCUGGCUGCACAGCGGCGACAUCGCCUACUGGGACGAGGACGAGCACUUCUUCAUCGU
CGACCGGCUGAAGUCGCUGAUCAAGUACAAGGGCUACCAGGUGGCGCCGGCCGAGCUGGA
GAGCAUCCUGCUCCAGCACCCCAACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGA
CGACGCCGGCGAGCUGCCGGCCGCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGA
GAAGGAGAUCGUCGACUACGUGGCCAGCCAGGUGACCACCGCCAAGAAGCUGCGGGGCGG
CGUGGUGUUCGUGGACGAGGUCCCGAAGGGCCUGACCGGGAAGCUCGACGCCCGGAAGAU
*CCGCGAGAUCCUGAUCAAGGCCAAGAAGGGCGGCAAGAUCGCCGUGUAA*GACUAGUGAAG
GGAACACCCAAAUUUAAUUCAGCCUUAAGCACAAUUAAUUAAGAGUGAAACGUAAUUGUA
CAAGCAGUUGGUCACCCACCAUAGGGCAUGAUCAACACCGCAACCUUUCCUUUUUCCCCC
AGUGAUUCUGAAAAACCCCUCUUCCCUUCAGCUUGCUUAGAUGUUCCAAAUUUAGUAAGC
UUAAGGCGGCCUACAGAAGAAAAAGAAAAAAAAGGCCACAAAAGUUCCCUCUCACUUUCA
GUAAAUAAAAUAAAAGCAGCAACAGAAAUAAAGAAAUAAAUGAAAUUCAAAAUGAAAUAA
AUAUUGUGUUGUGCAGCAUUAAAAAAUCAAUAAAAAUUAAAAAUGAGCAAGAUCUAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
GCAUCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCAAAGGCUCUUUUCAGAGCCACCAGA
AUU

Fig. 11

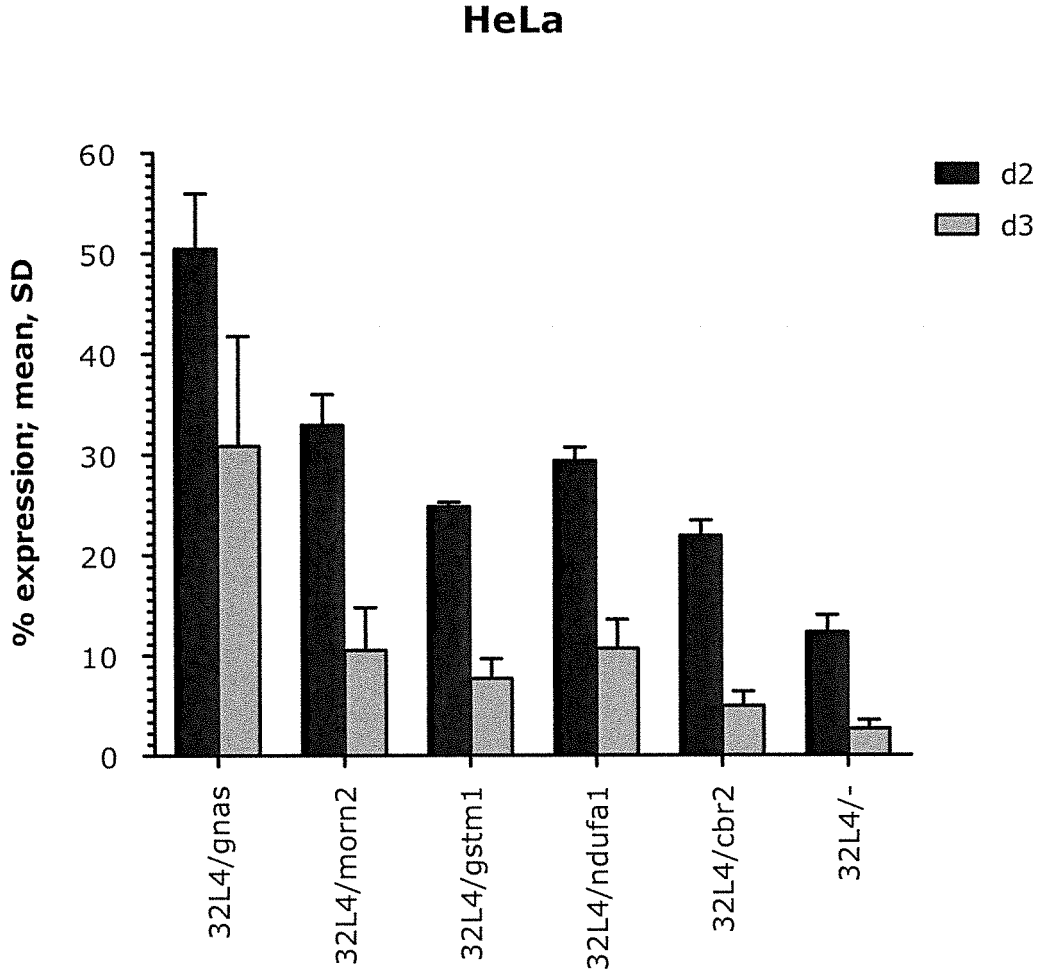

HeLa
% expression; mean, SD
60
50
40
30
20
10
0
d2
d3
32L4/gnas
32L4/morn2
32L4/gstm1
32L4/ndufa1
32L4/cbr2
32L4/-

Fig. 12

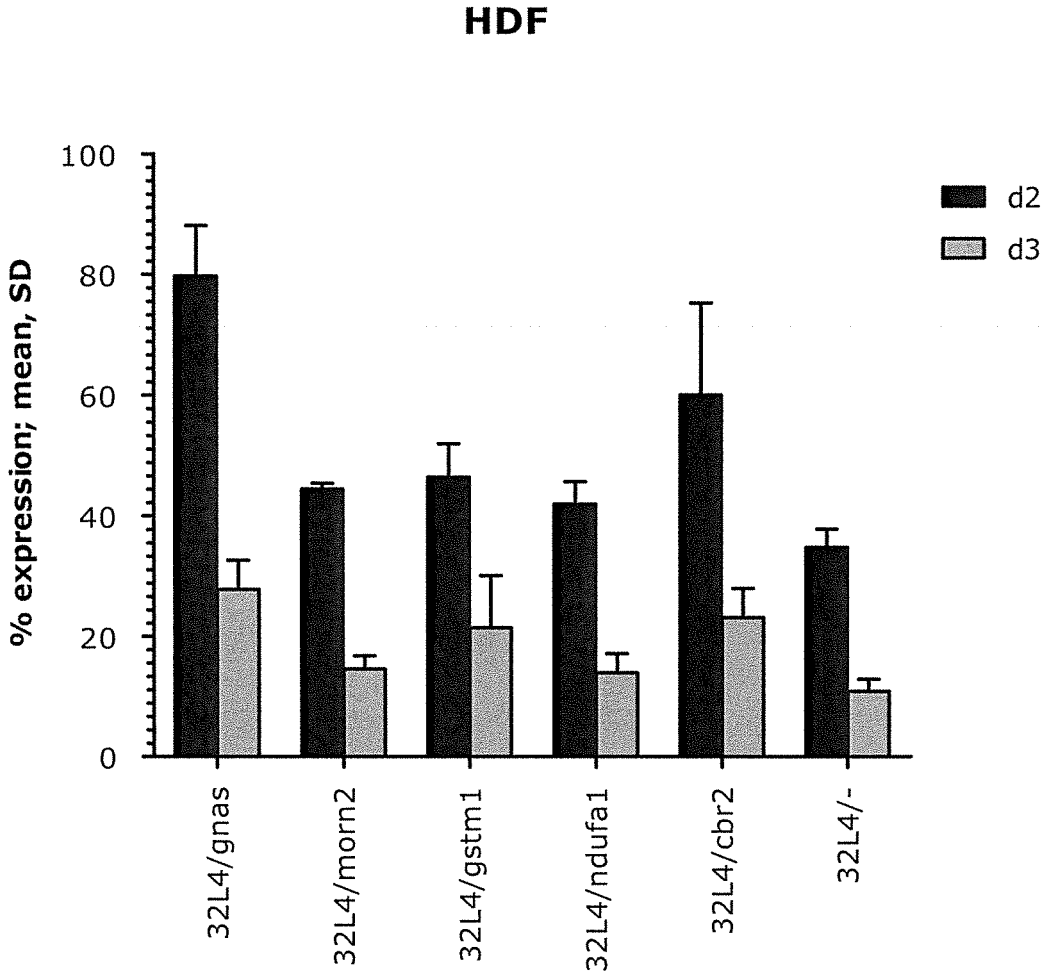

HDF
% expression; mean, SD
100
80
60
40
20
0
d2
d3
32L4/gnas
32L4/morn2
32L4/gstm1
32L4/ndufa1
32L4/cbr2
32L4/-

Fig. 13

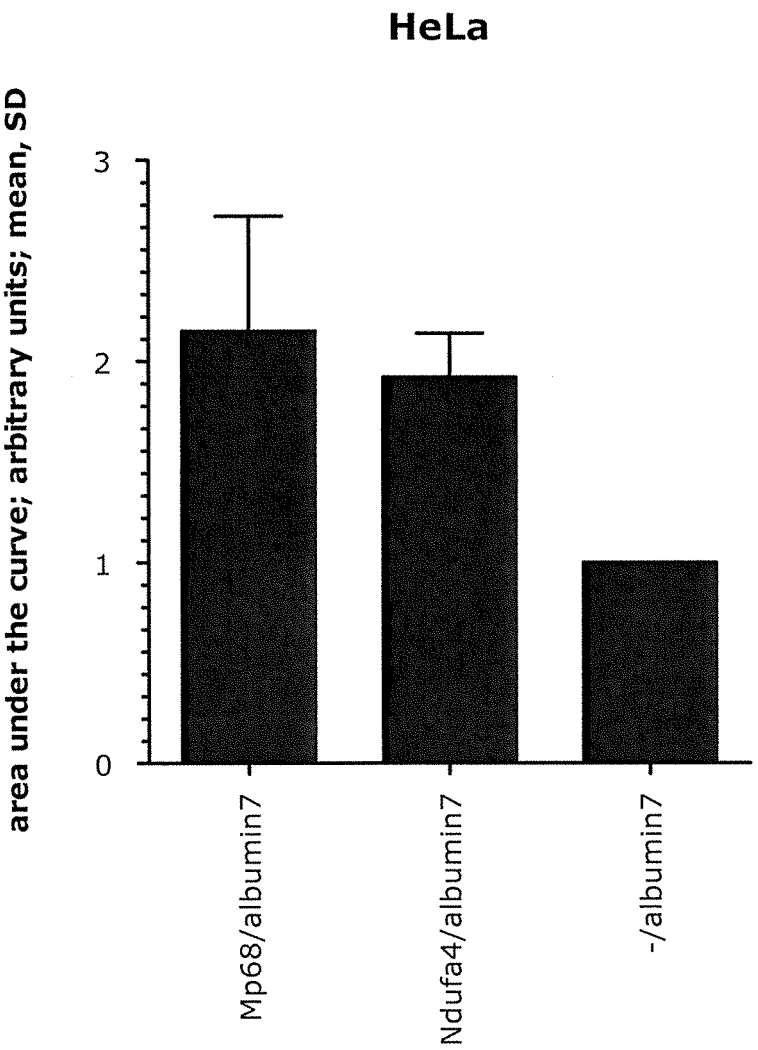

HeLa
area under the curve; arbitrary units; mean, SD
3
2
1
0
Mp68/albumin7
Ndufa4/albumin7
-/albumin7

Fig. 14

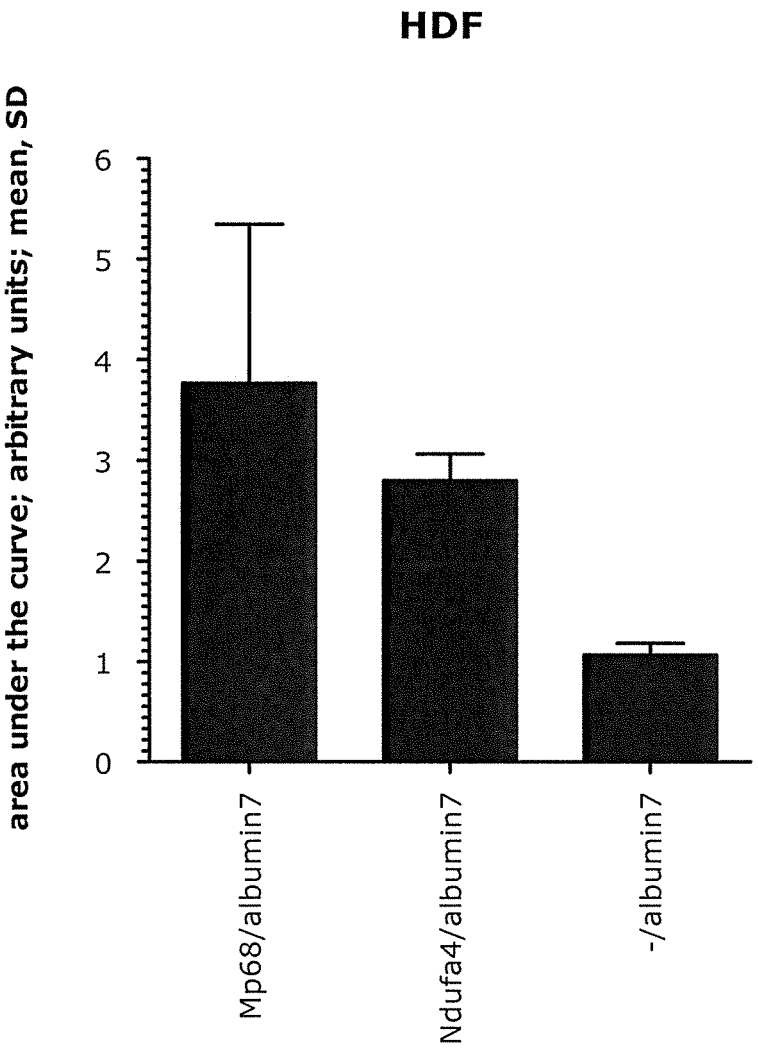

HDF
area under the curve; arbitrary units; mean, SD
6
5
4
3
2
1
0
Mp68/albumin7
Ndufa4/albumin7
-/albumin7

Fig. 15

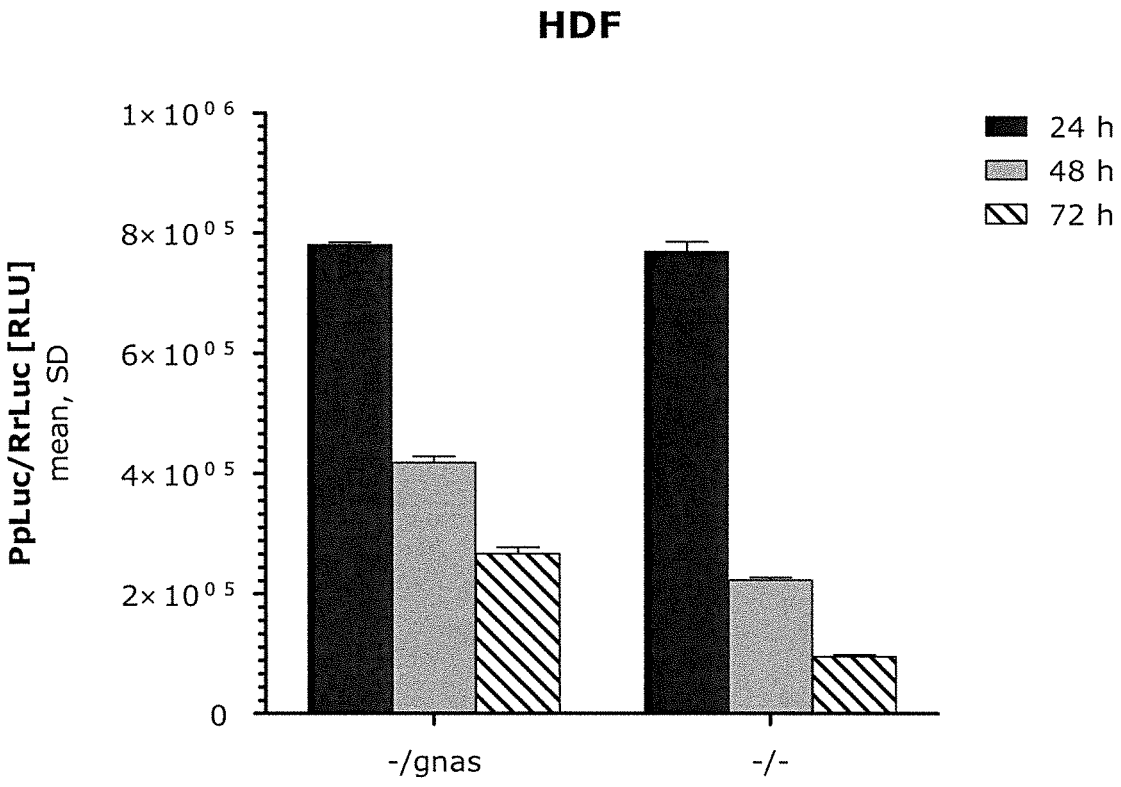

HDF
1× 10^06
8× 10^05
6× 10^05
4× 10^05
2× 10^05
0
PpLuc/RrLuc [RLU]
mean, SD
24 h
48 h
72 h
-/gnas
-/-

Fig. 16

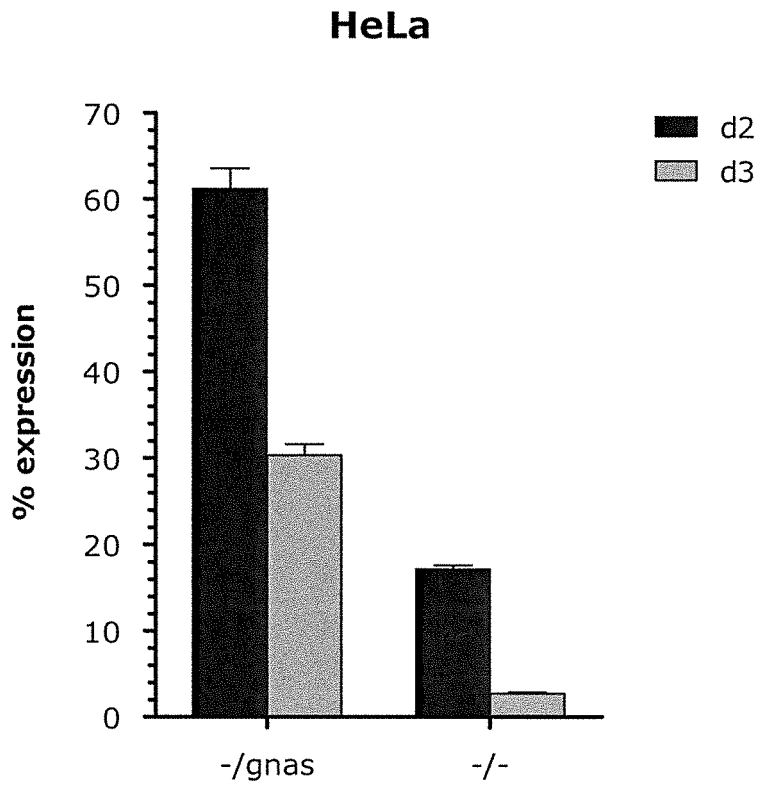


Fig. 17

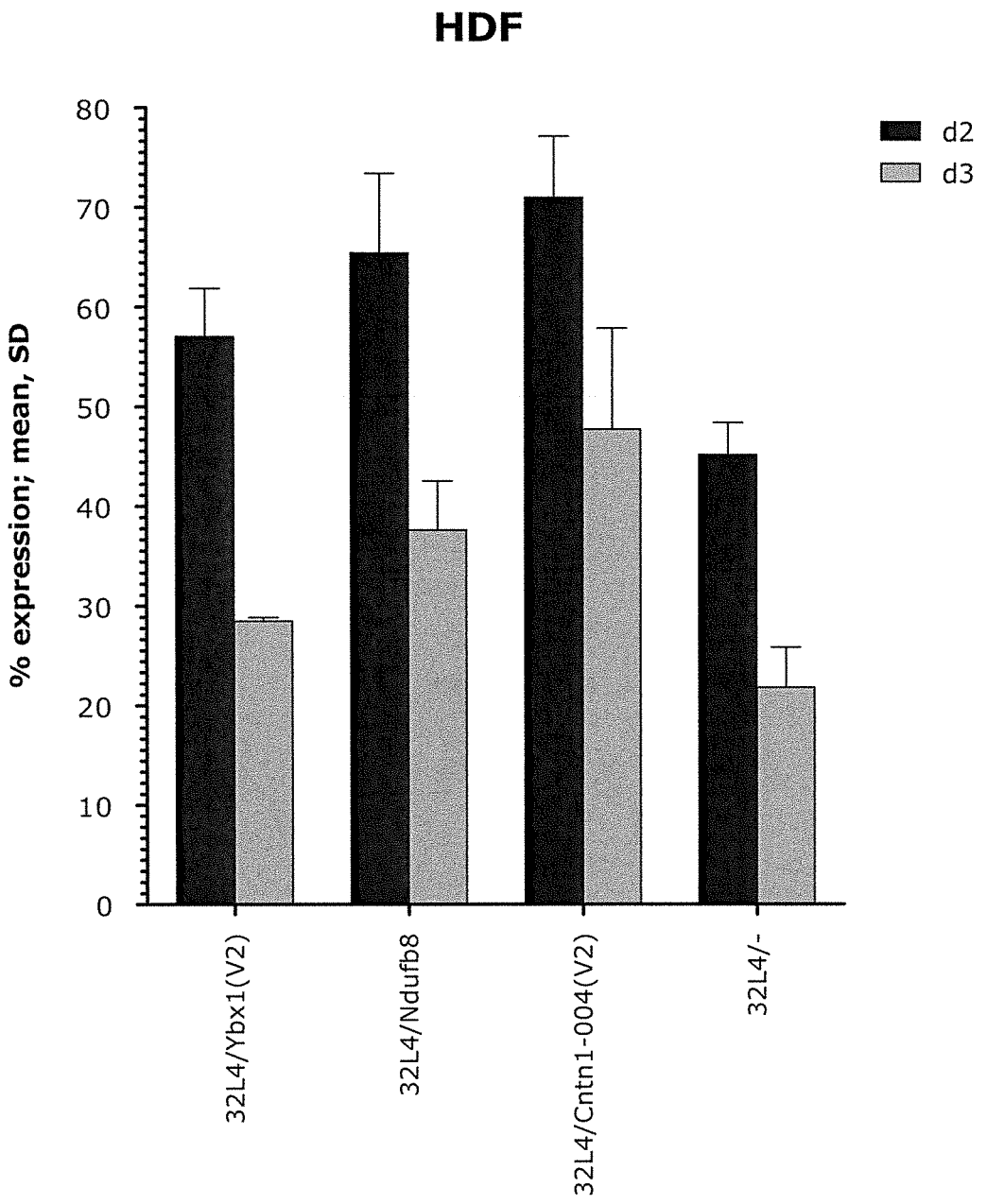

HDF
% expression; mean, SD
80
70
60
50
40
30
20
10
0
d2
d3
32L4/Ybx1(V2)
32L4/Ndufb8
32L4/Cntn1-004(V2)
32L4/-

Fig. 18

32L4 – PpLuc(GC) – Ybx1(V2)-A64-C30-hSL (R3623)

3´UTR with mutation T128bpG and deletion del236-237bp

(SEQ ID NO: 46):

GGGGCGCUGCCUACGGAGGUGGCAGCCAUCUCCUUCUCGGCAUCAAGCUUGAGGAUGGAG
GACGCCAAGAACAUCAAGAAGGGCCCGGCGCCCUUCUACCCGCUGGAGGACGGGACCGCC
GGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCUGGUGCCGGGCACGAUCGCCUUC
ACCGACGCCCACAUCGAGGUCGACAUCACCUACGCGGAGUACUUCGAGAUGAGCGUGCGC
CUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAACCACCGGAUCGUGGUGUGCUCG
GAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGCCCUCUUCAUCGGCGUGGCCGUC
GCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCUGAACAGCAUGGGGAUCAGCCAG
CCGACCGUGGUGUUCGUGAGCAAGAAGGGCCUGCAGAAGAUCCUGAACGUGCAGAAGAAG
CUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAAGACCGACUACCAGGGCUUCCAG
UCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGGCUUCAACGAGUACGACUUCGUC
CCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAUCAUGAACAGCAGCGGCAGCACC
GGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGCCUGCGUGCGCUUCUCGCACGCC
CGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACACCGCCAUCCUGAGCGUGGUGCCG
UUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUACCUCAUCUGCGGCUUCCGGGUG
GUCCUGAUGUACCGGUUCGAGGAGGAGCUGUUCCUGCGGAGCCUGCAGGACUACAAGAUC
CAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUUCGCCAAGAGCACCCUGAUCGAC
AAGUACGACCUGUCGAACCUGCACGAGAUCGCCAGCGGGGGCGCCCCGCUGAGCAAGGAG
GUGGGCGAGGCCGUGGCCAAGCGGUUCCACCUCCCGGGCAUCCGCCAGGGCUACGGCCUG
ACCGAGACCACGAGCGCGAUCCUGAUCACCCCCGAGGGGGACGACAAGCCGGGCGCCGUG
GGCAAGGUGGUCCCGUUCUUCGAGGCCAAGGUGGUGGACCUGGACACCGGCAAGACCCUG
GGCGUGAACCAGCGGGGCGAGCUGUGCGUGCGGGGGCCGAUGAUCAUGAGCGGCUACGUG
AACAACCCGGAGGCCACCAACGCCCUCAUCGACAAGGACGGCUGGCUGCACAGCGGCGAC
AUCGCCUACUGGGACGAGGACGAGCACUUCUUCAUCGUCGACCGGCUGAAGUCGCUGAUC
AAGUACAAGGGCUACCAGGUGGCGCCGGCCGAGCUGGAGAGCAUCCUGCUCCAGCACCCC
AACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGACGACGCCGGCGAGCUGCCGGCC
GCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGAGAAGGAGAUCGUCGACUACGUG
GCCAGCCAGGUGACCACCGCCAAGAAGCUGCGGGGCGGCGUGGUGUUCGUGGACGAGGUC
CCGAAGGGCCUGACCGGGAAGCUCGACGCCCGGAAGAUCCGCGAGAUCCUGAUCAAGGCC
AAGAAGGGCGGCAAGAUCGCCGUGUAAGACUAGUAUGCCGGCUUACCAUCUCUACCAUCA
UCCGGUUUGGUCAUCCAACAAGAAGAAAUGAAUAUGAAAUUCCAGCAAUAAGAAAUGAAC
AAAGAUUGGAGCUGAAGACCUUAAGUGCUUGCUUUUUGCCCGCUGACCAGAUAACAUUAG
AACUAUCUGCAUUAUCUAUGCAGCAUGGGGUUUUUAUUAUUUUUACCUAAAGAUGUCUCU
UUUUGGUAAUGACAAACGUGUUUUUUAAGAAAAAAAAAAAAAGGCCUGGUUUUUCUCAAUA
CACCUUUAACGGUUUUUAAAUUGUUUCAUAUCUGGUCAAGUUGAGAUUUUUAAGAACUUC
AUUUUUAAUUUGUAAUAAAGUUUACAACUUGAUUUUUUCAAAAAAGUCAACAAACUGCAA
GCACCUGUUAAUAAAGGUCUUAAAUAAUAAAGAUCUAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAUGCAUCCCCCCCCCCCCCCC
CCCCCCCCCCCCCCCCAAAGGCUCUUUUCAGAGCCACCAGAAUU

Fig. 19

32L4 – PpLuc(GC) – Ndufb8-A64-C30-hSL (R3624)

(SEQ ID NO: 47):

GGGGCGCUGCCUACGGAGGUGGCAGCCAUCUCCUUCUCGGCAUCAAGCUUGAGG*AUGGAG*
GACGCCAAGAACAUCAAGAAGGGCCCGGCGCCCUUCUACCCGCUGGAGGACGGGACCGCC
GGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCUGGUGCCGGGCACGAUCGCCUUC
ACCGACGCCCACAUCGAGGUCGACAUCACCUACGCGGAGUACUUCGAGAUGAGCGUGCGC
CUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAACCACCGGAUCGUGGUGUGCUCG
GAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGCCCUCUUCAUCGGCGUGGCCGUC
GCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCUGAACAGCAUGGGGAUCAGCCAG
CCGACCGUGGUGUUCGUGAGCAAGAAGGGCCUGCAGAAGAUCCUGAACGUGCAGAAGAAG
CUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAAGACCGACUACCAGGGCUUCCAG
UCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGGCUUCAACGAGUACGACUUCGUC
CCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAUCAUGAACAGCAGCGGCAGCACC
GGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGCCUGCGUGCGCUUCUCGCACGCC
CGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACACCGCCAUCCUGAGCGUGGUGCCG
UUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUACCUCAUCUGCGGCUUCCGGGUG
GUCCUGAUGUACCGGUUCGAGGAGGAGCUGUUCCUGCGGAGCCUGCAGGACUACAAGAUC
CAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUUCGCCAAGAGCACCCUGAUCGAC
AAGUACGACCUGUCGAACCUGCACGAGAUCGCCAGCGGGGGCGCCCCGCUGAGCAAGGAG
GUGGGCGAGGCCGUGGCCAAGCGGUUCCACCUCCCGGGCAUCCGCCAGGGCUACGGCCUG
ACCGAGACCACGAGCGCGAUCCUGAUCACCCCCGAGGGGGACGACAAGCCGGGCGCCGUG
GGCAAGGUGGUCCCGUUCUUCGAGGCCAAGGUGGUGGACCUGGACACCGGCAAGACCCUG
GGCGUGAACCAGCGGGGCGAGCUGUGCGUGCGGGGGCCGAUGAUCAUGAGCGGCUACGUG
AACAACCCGGAGGCCACCAACGCCCUCAUCGACAAGGACGGCUGGCUGCACAGCGGCGAC
AUCGCCUACUGGGACGAGGACGAGCACUUCUUCAUCGUCGACCGGCUGAAGUCGCUGAUC
AAGUACAAGGGCUACCAGGUGGCGCCGGCCGAGCUGGAGAGCAUCCUGCUCCAGCACCCC
AACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGACGACGCCGGCGAGCUGCCGGCC
GCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGAGAAGGAGAUCGUCGACUACGUG
GCCAGCCAGGUGACCACCGCCAAGAAGCUGCGGGGCGGCGUGGUGUUCGUGGACGAGGUC
CCGAAGGGCCUGACCGGGAAGCUCGACGCCCGGAAGAUCCGCGAGAUCCUGAUCAAGGCC
*AAGAAGGGCGGCAAGAUCGCCGUGUAA*GACUAGUGGAGGCUUGAUGGGCUUUUUGCCCUC
GUUCCUAGAGGCUUAACCAUAAUAAAAUCCCUAAUAAAGCAGAUCUAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAUGCAUCCCCCCC
CCCCCCCCCCCCCCCCCCCCCCCCAAAGGCUCUUUUCAGAGCCACCAGAAUU

Fig. 20

32L4 – PpLuc(GC) – Cntn1-004(V2)-A64-C30-hSL (R3625)
+T at pos. 30bp, mutations G727bpT, A840bpG

(SEQ ID NO: 48):

GGGGCGCUGCCUACGGAGGUGGCAGCCAUCUCCUUCUCGGCAUCAAGCUUGAGGAUGGAG
GACGCCAAGAACAUCAAGAAGGGCCCGGCGCCCUUCUACCCGCUGGAGGACGGGACCGCC
GGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCUGGUGCCGGGCACGAUCGCCUUC
ACCGACGCCCACAUCGAGGUCGACAUCACCUACGCGGAGUACUUCGAGAUGAGCGUGCGC
CUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAACCACCGGAUCGUGGUGUGCUCG
GAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGCCCUCUUCAUCGGCGUGGCCGUC
GCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCUGAACAGCAUGGGGAUCAGCCAG
CCGACCGUGGUGUUCGUGAGCAAGAAGGGCCUGCAGAAGAUCCUGAACGUGCAGAAGAAG
CUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAAGACCGACUACCAGGGCUUCCAG
UCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGGCUUCAACGAGUACGACUUCGUC
CCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAUCAUGAACAGCAGCGGCAGCACC
GGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGCCUGCGUGCGCUUCUCGCACGCC
CGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACACCGCCAUCCUGAGCGUGGUGCCG
UUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUACCUCAUCUGCGGCUUCCGGGUG
GUCCUGAUGUACCGGUUCGAGGAGGAGCUGUUCCUGCGGAGCCUGCAGGACUACAAGAUC
CAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUUCGCCAAGAGCACCCUGAUCGAC
AAGUACGACCUGUCGAACCUGCACGAGAUCGCCAGCGGGGGCGCCCCGCUGAGCAAGGAG
GUGGGCGAGGCCGUGGCCAAGCGGUUCCACCUCCCGGGCAUCCGCCAGGGCUACGGCCUG
ACCGAGACCACGAGCGCGAUCCUGAUCACCCCCGAGGGGGACGACAAGCCGGGCGCCGUG
GGCAAGGUGGUCCCGUUCUUCGAGGCCAAGGUGGUGGACCUGGACACCGGCAAGACCCUG
GGCGUGAACCAGCGGGGCGAGCUGUGCGUGCGGGGGCCGAUGAUCAUGAGCGGCUACGUG
AACAACCCGGAGGCCACCAACGCCCUCAUCGACAAGGACGGCUGGCUGCACAGCGGCGAC
AUCGCCUACUGGGACGAGGACGAGCACUUCUUCAUCGUCGACCGGCUGAAGUCGCUGAUC
AAGUACAAGGGCUACCAGGUGGCGCCGGCCGAGCUGGAGAGCAUCCUGCUCCAGCACCCC
AACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGACGACGCCGGCGAGCUGCCGGCC
GCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGAGAAGGAGAUCGUCGACUACGUG
GCCAGCCAGGUGACCACCGCCAAGAAGCUGCGGGGCGGCGUGGUGUUCGUGGACGAGGUC
CCGAAGGGCCUGACCGGGAAGCUCGACGCCCGGAAGAUCCGCGAGAUCCUGAUCAAGGCC
AAGAAGGGCGGCAAGAUCGCCGUGUAAGACUAGUUCGUUGACACUCACCAUUUCUGUGAA
AGACUUUUUUUUUUUUUAACAUAUUAUACUAGAUUUGACUAACUCAAUCUUGUAGCUUCU
GCAGUUCUCCCCACCCCCAACCUAGUUCUUAGAGUAUGUUUCCCCUUUUGAAACAUGUAA
ACAUACUUUGGGCAUAAAUAUUUUUUAAAAUAUAACUAUAAUGCUUCACUAAUACCUUAA
AAAUGCCUAGUGAACUAACUCAGUACAUUAUAUAAUGGCCAAGUGAAAGUUUUGUGUUUU
CAUGUCCUGUUUUUCUUUGAAAUUAUAUAGCCCAGAAAUUAGCUCAUUAUCUGAAAAACG
UAUGAAGAACUGAUGAAUUGUAUAAUACAGGAGUAUUGCCAUUGAAUGUACUGUUUGAUU
UAUUCAAGCAGGUAAUGAACAAUGUUGUCAAACUCUCUAAUGAGACAUCAUAAUUAGGAC
AUAAGCUAAAAGGGGCAUUACUCCGGCAGUCUUUUUUUCUUAAUCCUAGUACCAUACAUA
UUCUUUGGCAUGAAAGAAUGAAAAGCAUUAGUAAACAACUGAAGUCCUACCAUGGCUCUG
UAGGGUUUUUGGAACAAUUCCUGGAAUUGGAAAGUGAAAAUGGAUAGCAUGUGGGGGAAA
CCCUCAUCUGAGUAGCAAGAUUUUAGUAAAGAUGACUAAGCCAUUAACAGCAUGCAUUCA
UAUUUAAUUUUAUUGACUCCUGCCAUCAGCUUUUGUAGAUCUUUUGGGUGGAAGGUUGUG
AUUUUUACUGGGAGGACUUGAGUAGAAGUGGAUGAUUAAAAUUGAGGAGUAUAUAAUUCU
UUCUGGGACUGCUUAAAUGUUAUUGUUUGAAAAUGCCUUCACUUUCCCCCUUUGGUCAAA
GAGAUGUGCUUAAAAUUCUUAUUCCUUCACAAUAAAUAAUUUUGAUUUUCUUAGACAAGA
UCUAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAUGCAUCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCAAAGGCUCUUUUCAGAG
CCACCAGAAUU

Fig. 21

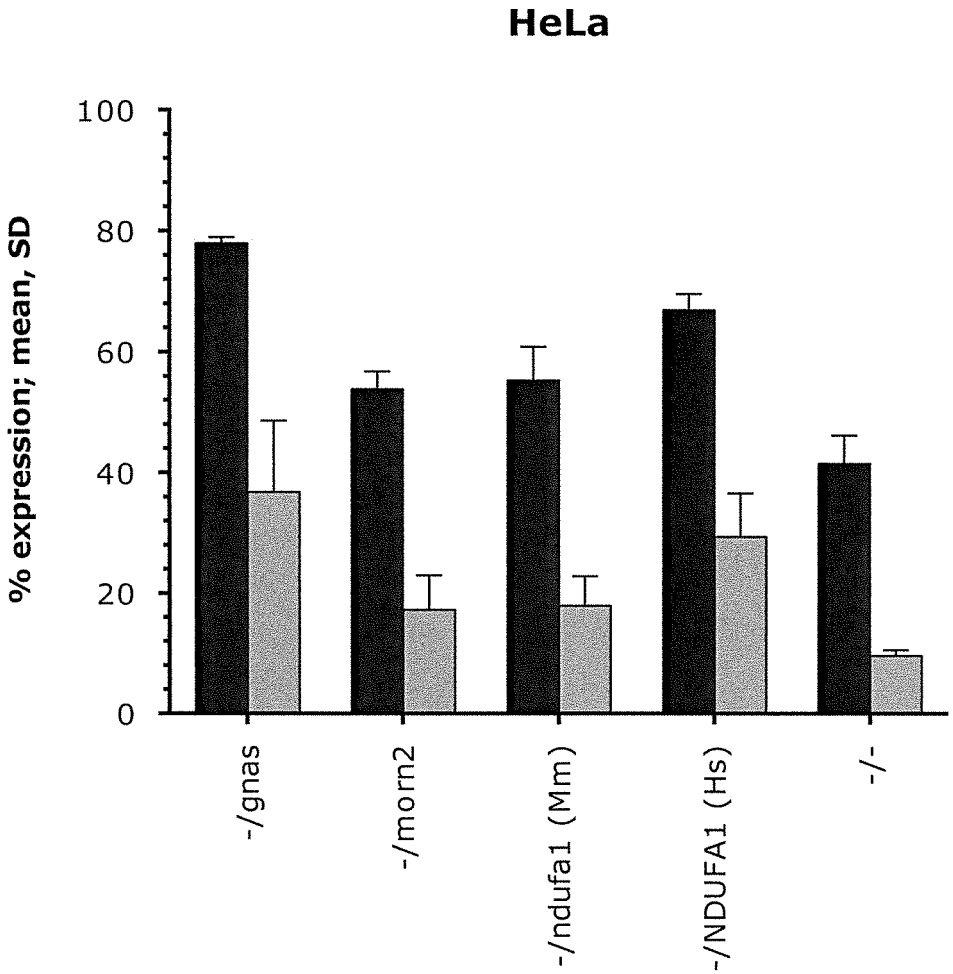

HeLa
% expression; mean, SD
100
80
60
40
20
0
-/gnas
-/morn2
-/ndufa1 (Mm)
-/NDUFA1 (Hs)
-/-

Fig. 22

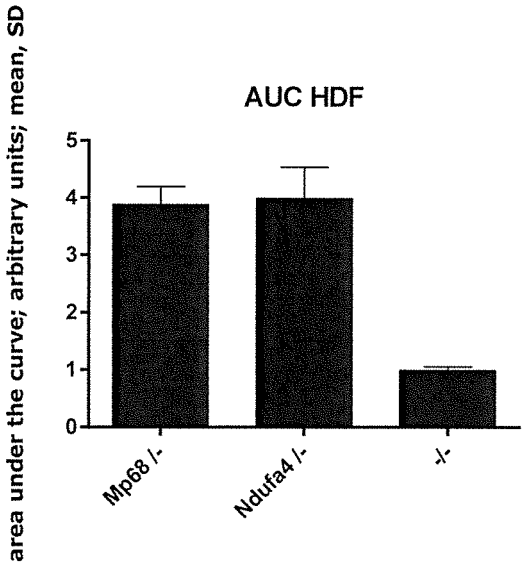

AUC HDF
area under the curve; arbitrary units; mean, SD
5
4
3
2
1
0
Mp68 /-
Ndufa4 /-
-/-

Fig. 23

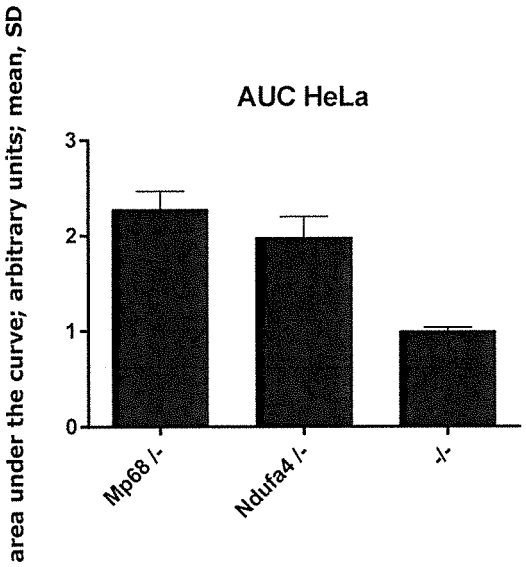

AUC HeLa
area under the curve; arbitrary units; mean, SD
3
2
1
0
Mp68 /-
Ndufa4 /-
-/-

Fig. 24

32L4 – PpLuc(GC) – A64-C30-hSL (R2462)
(SEQ ID NO: 383)

GGGAGAAAGCUUGAGG*AUGGAGGACGCCAAGAACAUCAAGAAGGGCCCGGCGCCCUUCUA*
CCCGCUGGAGGACGGGACCGCCGGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCU
GGUGCCGGGCACGAUCGCCUUCACCGACGCCCACAUCGAGGUCGACAUCACCUACGCGGA
GUACUUCGAGAUGAGCGUGCGCCUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAA
CCACCGGAUCGUGGUGUGCUCGGAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGC
CCUCUUCAUCGGCGUGGCCGUCGCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCU
GAACAGCAUGGGGAUCAGCCAGCCGACCGUGGUGUUCGUGAGCAAGAAGGGCCUGCAGAA
GAUCCUGAACGUGCAGAAGAAGCUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAA
GACCGACUACCAGGGCUUCCAGUCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGG
CUUCAACGAGUACGACUUCGUCCCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAU
CAUGAACAGCAGCGGCAGCACCGGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGC
CUGCGUGCGCUUCUCGCACGCCCGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACAC
CGCCAUCCUGAGCGUGGUGCCGUUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUA
CCUCAUCUGCGGCUUCCGGGUGGUCCUGAUGUACCGGUUCGAGGAGGAGCUGUUCCUGCG
GAGCCUGCAGGACUACAAGAUCCAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUU
CGCCAAGAGCACCCUGAUCGACAAGUACGACCUGUCGAACCUGCACGAGAUCGCCAGCGG
GGGCGCCCCGCUGAGCAAGGAGGUGGGCGAGGCCGUGGCCAAGCGGUUCCACCUCCCGGG
CAUCCGCCAGGGCUACGGCCUGACCGAGACCACGAGCGCGAUCCUGAUCACCCCCGAGGG
GGACGACAAGCCGGGCGCCGUGGGCAAGGUGGUCCCGUUCUUCGAGGCCAAGGUGGUGGA
CCUGGACACCGGCAAGACCCUGGGCGUGAACCAGCGGGGCGAGCUGUGCGUGCGGGGGCC
GAUGAUCAUGAGCGGCUACGUGAACAACCCGGAGGCCACCAACGCCCUCAUCGACAAGGA
CGGCUGGCUGCACAGCGGCGACAUCGCCUACUGGGACGAGGACGAGCACUUCUUCAUCGU
CGACCGGCUGAAGUCGCUGAUCAAGUACAAGGGCUACCAGGUGGCGCCGGCCGAGCUGGA
GAGCAUCCUGCUCCAGCACCCCAACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGA
CGACGCCGGCGAGCUGCCGGCCGCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGA
GAAGGAGAUCGUCGACUACGUGGCCAGCCAGGUGACCACCGCCAAGAAGCUGCGGGGCGG
CGUGGUGUUCGUGGACGAGGUCCCGAAGGGCCUGACCGGGAAGCUCGACGCCCGGAAGAU
*CCGCGAGAUCCUGAUCAAGGCCAAGAAGGGCGGCAAGAUCGCCGUGUAA*GACUAGUAGAU
CUAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAUGCAUCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCAAAGGCUCUUUUCAGAGC
CACCAGAAUU

Fig. 25

PpLuc(GC) – morn2– A64 - C30 - hSL (R3948)
(SEQ ID NO: 384)

GGGAGAAAGCUUGAGG*AUGGAGGACGCCAAGAACAUCAAGAAGGGCCCGGCGCCCUUCUA*
CCCGCUGGAGGACGGGACCGCCGGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCU
GGUGCCGGGCACGAUCGCCUUCACCGACGCCCACAUCGAGGUCGACAUCACCUACGCGGA
GUACUUCGAGAUGAGCGUGCGCCUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAA
CCACCGGAUCGUGGUGUGCUCGGAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGC
CCUCUUCAUCGGCGUGGCCGUCGCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCU
GAACAGCAUGGGGAUCAGCCAGCCGACCGUGGUGUUCGUGAGCAAGAAGGGCCUGCAGAA
GAUCCUGAACGUGCAGAAGAAGCUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAA
GACCGACUACCAGGGCUUCCAGUCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGG
CUUCAACGAGUACGACUUCGUCCCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAU
CAUGAACAGCAGCGGCAGCACCGGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGC
CUGCGUGCGCUUCUCGCACGCCCGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACAC
CGCCAUCCUGAGCGUGGUGCCGUUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUA
CCUCAUCUGCGGCUUCCGGGUGGUCCUGAUGUACCGGUUCGAGGAGGAGCUGUUCCUGCG
GAGCCUGCAGGACUACAAGAUCCAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUU
CGCCAAGAGCACCCUGAUCGACAAGUACGACCUGUCGAACCUGCACGAGAUCGCCAGCGG
GGGCGCCCCGCUGAGCAAGGAGGUGGGCGAGGCCGUGGCCAAGCGGUUCCACCUCCCGGG
CAUCCGCCAGGGCUACGGCCUGACCGAGACCACGAGCGCGAUCCUGAUCACCCCCGAGGG
GGACGACAAGCCGGGCGCCGUGGGCAAGGUGGUCCCGUUCUUCGAGGCCAAGGUGGUGGA
CCUGGACACCGGCAAGACCCUGGGCGUGAACCAGCGGGGCGAGCUGUGCGUGCGGGGGCC
GAUGAUCAUGAGCGGCUACGUGAACAACCCGGAGGCCACCAACGCCCUCAUCGACAAGGA
CGGCUGGCUGCACAGCGGCGACAUCGCCUACUGGGACGAGGACGAGCACUUCUUCAUCGU
CGACCGGCUGAAGUCGCUGAUCAAGUACAAGGGCUACCAGGUGGCGCCGGCCGAGCUGGA
GAGCAUCCUGCUCCAGCACCCCAACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGA
CGACGCCGGCGAGCUGCCGGCCGCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGA
GAAGGAGAUCGUCGACUACGUGGCCAGCCAGGUGACCACCGCCAAGAAGCUGCGGGGCGG
CGUGGUGUUCGUGGACGAGGUCCCGAAGGGCCUGACCGGGAAGCUCGACGCCCGGAAGAU
*CCGCGAGAUCCUGAUCAAGGCCAAGAAGGGCGGCAAGAUCGCCGUGUAA*GACUAGUACCU
GCUGCCUUAACGCUGAGAUGUGGCCUCUGCAACCCCCCUUAGGCAAAGCAACUGAACCUU
CUGCUAAAGUGACCUGCCCUCUUCCGUAAGUCCAAUAAAGUUGUCAUGCACCCAGAUCUA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAUGCAUCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCAAAGGCUCUUUUCAGAGCCAC
CAGAAUU

Fig. 26

PpLuc(GC) – ndufa1– A64 - C30 - hSL (R4043)
(SEQ ID NO: 385)

GGGAGAAAGCUUGAGGAUGGAGGACGCCAAGAACAUCAAGAAGGGCCCGGCGCCCUUCUA
CCCGCUGGAGGACGGGACCGCCGGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCU
GGUGCCGGGCACGAUCGCCUUCACCGACGCCCACAUCGAGGUCGACAUCACCUACGCGGA
GUACUUCGAGAUGAGCGUGCGCCUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAA
CCACCGGAUCGUGGUGUGCUCGGAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGC
CCUCUUCAUCGGCGUGGCCGUCGCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCU
GAACAGCAUGGGGAUCAGCCAGCCGACCGUGGUGUUCGUGAGCAAGAAGGGCCUGCAGAA
GAUCCUGAACGUGCAGAAGAAGCUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAA
GACCGACUACCAGGGCUUCCAGUCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGG
CUUCAACGAGUACGACUUCGUCCCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAU
CAUGAACAGCAGCGGCAGCACCGGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGC
CUGCGUGCGCUUCUCGCACGCCCGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACAC
CGCCAUCCUGAGCGUGGUGCCGUUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUA
CCUCAUCUGCGGCUUCCGGGUGGUCCUGAUGUACCGGUUCGAGGAGGAGCUGUUCCUGCG
GAGCCUGCAGGACUACAAGAUCCAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUU
CGCCAAGAGCACCCUGAUCGACAAGUACGACCUGUCGAACCUGCACGAGAUCGCCAGCGG
GGGCGCCCCGCUGAGCAAGGAGGUGGGCGAGGCCGUGGCCAAGCGGUUCCACCUCCCGGG
CAUCCGCCAGGGCUACGGCCUGACCGAGACCACGAGCGCGAUCCUGAUCACCCCCGAGGG
GGACGACAAGCCGGGCGCCGUGGGCAAGGUGGUCCCGUUCUUCGAGGCCAAGGUGGUGGA
CCUGGACACCGGCAAGACCCUGGGCGUGAACCAGCGGGGCGAGCUGUGCGUGCGGGGCC
GAUGAUCAUGAGCGGCUACGUGAACAACCCGGAGGCCACCAACGCCCUCAUCGACAAGGA
CGGCUGGCUGCACAGCGGCGACAUCGCCUACUGGGACGAGGACGAGCACUUCUUCAUCGU
CGACCGGCUGAAGUCGCUGAUCAAGUACAAGGGCUACCAGGUGGCGCCGGCCGAGCUGGA
GAGCAUCCUGCUCCAGCACCCCAACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGA
CGACGCCGGCGAGCUGCCGGCCGCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGA
GAAGGAGAUCGUCGACUACGUGGCCAGCCAGGUGACCACCGCCAAGAAGCUGCGGGGCGG
CGUGGUGUUCGUGGACGAGGUCCCGAAGGGCCUGACCGGGAAGCUCGACGCCCGGAAGAU
CCGCGAGAUCCUGAUCAAGGCCAAGAAGGGCGGCAAGAUCGCCGUGUAAGACUAGUGGAA
GCAUUUUCCUGGCUGAUUAAAAGAAAUUACUCAGCUAUGGUCAUCUGUUCCUGUUAGAAG
GCUAUGCAGCAUAUUAUAUACUAUGCGCAUGUUAUGAAAUGCAUAAUAAAAAAUUUUAAA
AAAUCUAAAAGAUCUAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAUGCAUCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCAAAGG
CUCUUUUCAGAGCCACCAGAAUU

Fig. 27

PpLuc(GC) – NDUFA1– A64 - C30 - hSL (R3948)
(SEQ ID NO: 386)

GGGAGAAAGCUUGAGG*AUGGAGGACGCCAAGAACAUCAAGAAGGGCCCGGCGCCCUUCUA*
CCCGCUGGAGGACGGGACCGCCGGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCU
GGUGCCGGGCACGAUCGCCUUCACCGACGCCCACAUCGAGGUCGACAUCACCUACGCGGA
GUACUUCGAGAUGAGCGUGCGCCUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAA
CCACCGGAUCGUGGUGUGCUCGGAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGC
CCUCUUCAUCGGCGUGGCCGUCGCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCU
GAACAGCAUGGGGAUCAGCCAGCCGACCGUGGUGUUCGUGAGCAAGAAGGGCCUGCAGAA
GAUCCUGAACGUGCAGAAGAAGCUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAA
GACCGACUACCAGGGCUUCCAGUCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGG
CUUCAACGAGUACGACUUCGUCCCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAU
CAUGAACAGCAGCGGCAGCACCGGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGC
CUGCGUGCGCUUCUCGCACGCCCGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACAC
CGCCAUCCUGAGCGUGGUGCCGUUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUA
CCUCAUCUGCGGCUUCCGGGUGGUCCUGAUGUACCGGUUCGAGGAGGAGCUGUUCCUGCG
GAGCCUGCAGGACUACAAGAUCCAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUU
CGCCAAGAGCACCCUGAUCGACAAGUACGACCUGUCGAACCUGCACGAGAUCGCCAGCGG
GGGCGCCCCGCUGAGCAAGGAGGUGGGCGAGGCCGUGGCCAAGCGGUUCCACCUCCCGGG
CAUCCGCCAGGGCUACGGCCUGACCGAGACCACGAGCGCGAUCCUGAUCACCCCCGAGGG
GGACGACAAGCCGGGCGCCGUGGGCAAGGUGGUCCCGUUCUUCGAGGCCAAGGUGGUGGA
CCUGGACACCGGCAAGACCCUGGGCGUGAACCAGCGGGGCGAGCUGUGCGUGCGGGGCC
GAUGAUCAUGAGCGGCUACGUGAACAACCCGGAGGCCACCAACGCCCUCAUCGACAAGGA
CGGCUGGCUGCACAGCGGCGACAUCGCCUACUGGGACGAGGACGAGCACUUCUUCAUCGU
CGACCGGCUGAAGUCGCUGAUCAAGUACAAGGGCUACCAGGUGGCGCCGGCCGAGCUGGA
GAGCAUCCUGCUCCAGCACCCCAACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGA
CGACGCCGGCGAGCUGCCGGCCGCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGA
GAAGGAGAUCGUCGACUACGUGGCCAGCCAGGUGACCACCGCCAAGAAGCUGCGGGGCGG
CGUGGUGUUCGUGGACGAGGUCCCGAAGGGCCUGACCGGGAAGCUCGACGCCCGGAAGAU
*CCGCGAGAUCCUGAUCAAGGCCAAGAAGGGCGGCAAGAUCGCCGUGUAA*GACUAGUGGAA
GCAUUUUCCUGAUUGAUGAAAAAAAUAACUCAGUUAUGGCCAUCUACCCCUGCUAGAAGG
UUACAGUGUAUUAUGUAGCAUGCAAUGUGUUAUGUAGUGCUUAAUAAAAAUAAAAUGAAA
AAAAUGCAGAUCUAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAUGCAUCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCAAAGGCU
CUUUUCAGAGCCACCAGAAUU

Fig. 28

Mp68 - PpLuc(GC) – A64 - C30 - hSL (R3954)
(SEQ ID NO: 387)

GGGCUUUCCCAUUCUGUAGCAGAAUUUGGUGUUGCCUGUGGUCUUGGUCCCGCGGAGAAG
CUUGAGG*AUGGAGGACGCCAAGAACAUCAAGAAGGGCCCGGCGCCCUUCUACCCGCUGGA*
GGACGGGACCGCCGGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCUGGUGCCGGG
CACGAUCGCCUUCACCGACGCCCACAUCGAGGUCGACAUCACCUACGCGGAGUACUUCGA
GAUGAGCGUGCGCCUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAACCACCGGAU
CGUGGUGUGCUCGGAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGCCCUCUUCAU
CGGCGUGGCCGUCGCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCUGAACAGCAU
GGGGAUCAGCCAGCCGACCGUGGUGUUCGUGAGCAAGAAGGGCCUGCAGAAGAUCCUGAA
CGUGCAGAAGAAGCUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAAGACCGACUA
CCAGGGCUUCCAGUCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGGCUUCAACGA
GUACGACUUCGUCCCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAUCAUGAACAG
CAGCGGCAGCACCGGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGCCUGCGUGCG
CUUCUCGCACGCCCGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACACCGCCAUCCU
GAGCGUGGUGCCGUUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUACCUCAUCUG
CGGCUUCCGGGUGGUCCUGAUGUACCGGUUCGAGGAGGAGCUGUUCCUGCGGAGCCUGCA
GGACUACAAGAUCCAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUUCGCCAAGAG
CACCCUGAUCGACAAGUACGACCUGUCGAACCUGCACGAGAUCGCCAGCGGGGGCGCCCC
GCUGAGCAAGGAGGUGGGCGAGGCCGUGGCCAAGCGGUUCCACCUCCCGGGCAUCCGCCA
GGGCUACGGCCUGACCGAGACCACGAGCGCGAUCCUGAUCACCCCCGAGGGGGACGACAA
GCCGGGCGCCGUGGGCAAGGUGGUCCCGUUCUUCGAGGCCAAGGUGGUGGACCUGGACAC
CGGCAAGACCCUGGGCGUGAACCAGCGGGGCGAGCUGUGCGUGCGGGGGCCGAUGAUCAU
GAGCGGCUACGUGAACAACCCGGAGGCCACCAACGCCCUCAUCGACAAGGACGGCUGGCU
GCACAGCGGCGACAUCGCCUACUGGGACGAGGACGAGCACUUCUUCAUCGUCGACCGGCU
GAAGUCGCUGAUCAAGUACAAGGGCUACCAGGUGGCGCCGGCCGAGCUGGAGAGCAUCCU
GCUCCAGCACCCCAACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGACGACGCCGG
CGAGCUGCCGGCCGCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGAGAAGGAGAU
CGUCGACUACGUGGCCAGCCAGGUGACCACCGCCAAGAAGCUGCGGGGCGGCGUGGUGUU
CGUGGACGAGGUCCCGAAGGGCCUGACCGGGAAGCUCGACGCCCGGAAGAUCCGCGAGAU
*CCUGAUCAAGGCCAAGAAGGGCGGCAAGAUCGCCGUGUAA*GACUAGUAGAUCUAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAUGC
AUCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCAAAGGCUCUUUUCAGAGCCACCAGAAU
U

Fig. 29

Ndufa4 - PpLuc(GC) – A64 - C30 - hSL (R3951)
(SEQ ID NO: 388)

GGGGUCCGCUCAGCCAGGUUGCAGAAGCGGCUUAGCGUGUGUCCUAAUCUUCUCUCUGCG
UGUAGGUAGGCCUGUGCCGCAAACAAGCUUGAGG*AUGGAGGACGCCAAGAACAUCAAGAA*
GGGCCCGGCGCCCUUCUACCCGCUGGAGGACGGGACCGCCGGCGAGCAGCUCCACAAGGC
CAUGAAGCGGUACGCCCUGGUGCCGGGCACGAUCGCCUUCACCGACGCCCACAUCGAGGU
CGACAUCACCUACGCGGAGUACUUCGAGAUGAGCGUGCGCCUGGCCGAGGCCAUGAAGCG
GUACGGCCUGAACACCAACCACCGGAUCGUGGUGUGCUCGGAGAACAGCCUGCAGUUCUU
CAUGCCGGUGCUGGGCGCCCUCUUCAUCGGCGUGGCCGUCGCCCCGGCGAACGACAUCUA
CAACGAGCGGGAGCUGCUGAACAGCAUGGGGAUCAGCCAGCCGACCGUGGUGUUCGUGAG
CAAGAAGGGCCUGCAGAAGAUCCUGAACGUGCAGAAGAAGCUGCCCAUCAUCCAGAAGAU
CAUCAUCAUGGACAGCAAGACCGACUACCAGGGCUUCCAGUCGAUGUACACGUUCGUGAC
CAGCCACCUCCCGCCGGGCUUCAACGAGUACGACUUCGUCCCGGAGAGCUUCGACCGGGA
CAAGACCAUCGCCCUGAUCAUGAACAGCAGCGGCAGCACCGGCCUGCCGAAGGGGGUGGC
CCUGCCGCACCGGACCGCCUGCGUGCGCUUCUCGCACGCCCGGGACCCCAUCUUCGGCAA
CCAGAUCAUCCCGGACACCGCCAUCCUGAGCGUGGUGCCGUUCCACCACGGCUUCGGCAU
GUUCACGACCCUGGGCUACCUCAUCUGCGGCUUCCGGGUGGUCCUGAUGUACCGGUUCGA
GGAGGAGCUGUUCCUGCGGAGCCUGCAGGACUACAAGAUCCAGAGCGCGCUGCUCGUGCC
GACCCUGUUCAGCUUCUUCGCCAAGAGCACCCUGAUCGACAAGUACGACCUGUCGAACCU
GCACGAGAUCGCCAGCGGGGGCGCCCCGCUGAGCAAGGAGGUGGGCGAGGCCGUGGCCAA
GCGGUUCCACCUCCCGGGCAUCCGCCAGGGCUACGGCCUGACCGAGACCACGAGCGCGAU
CCUGAUCACCCCCGAGGGGGACGACAAGCCGGGCGCCGUGGGCAAGGUGGUCCCGUUCUU
CGAGGCCAAGGUGGUGGACCUGGACACCGGCAAGACCCUGGGCGUGAACCAGCGGGGCGA
GCUGUGCGUGCGGGGGCCGAUGAUCAUGAGCGGCUACGUGAACAACCCGGAGGCCACCAA
CGCCCUCAUCGACAAGGACGGCUGGCUGCACAGCGGCGACAUCGCCUACUGGGACGAGGA
CGAGCACUUCUUCAUCGUCGACCGGCUGAAGUCGCUGAUCAAGUACAAGGGCUACCAGGU
GGCGCCGGCCGAGCUGGAGAGCAUCCUGCUCCAGCACCCCAACAUCUUCGACGCCGGCGU
GGCCGGGCUGCCGGACGACGACGCCGGCGAGCUGCCGGCCGCGGUGGUGGUGCUGGAGCA
CGGCAAGACCAUGACGGAGAAGGAGAUCGUCGACUACGUGGCCAGCCAGGUGACCACCGC
CAAGAAGCUGCGGGGCGGCGUGGUGUUCGUGGACGAGGUCCCGAAGGGCCUGACCGGGAA
GCUCGACGCCCGGAAGAUCCGCGAGAUCCUGAUCAAGGCCAAGAAGGGCGGCAAGAUCGC
*CGUGUAA*GACUAGUAGAUCUAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAUGCAUCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
AAAGGCUCUUUUCAGAGCCACCAGAAUU

Fig. 30