

Fig. 1

SEQ ID No.1 (hs SGK1, cds)

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1   caccgagggag cgctaacgtc tttctgtctc ccgcggtgg tgatgacggt gaaaactgag
61  gctgctaagg gcacctcac ttactccagg atgaggggca tgggtggcaat totcatcgct
121 ttcatagaagc agaggaggat ggggtctgaac gactttattc agaagattgc caataactcc
181 tatgcatgca aacacctga agttcagtc atcttgaaga tctcccaacc tcaggagcct
241 gagcttatga atgccaaccc ttctctcca ccaagtcctt ctacgcaaat caaccttggc
301 ccgtcgtcca atcctcatgc taaacctct gactttcact tcttgaaagt gatcggaag
361 ggcagttttg gaaaggttct tctagcaaga cacaaggcag aagaagtgtt ctatgcagtc
421 aaagttttac agaagaaagc aatctgaaa aagaaaggag agaagcatat tatgtcggag
481 cggaatgttc tgttgaagaa tgtgaagcac cctttcctgg tgggccttca cttctcttcc
541 cagactgctg acaaattgta ctttgccta gactacatta atggtggaga gttgtctac
601 catctccaga gggaacgtg cttcctggaa ccacgggctc gtttctatgc tgctgaaata
661 gccagtgcct tgggctacct gcattcactg aacatcgttt atagagactt aaaaccagag
721 aatattttgc tagattcaca gggacacatt gtccttactg atttcggact ctgcaaggag
781 aacattgaac acaacagcac aacatccacc ttctgtggca cgccggagta tctcgacct
841 gaggtgcttc ataagcagcc ttatgacagg actgtggact ggtggtgcct gggagctgtc
901 ttgtatgaga tgctgtatgg cctgcgcctt ttttatagcc gaaacacagc tgaatgtac
961 gacaacattc tgaacaagcc tctccagctg aaaccaaata ttacaaattc cgcaagacac
1021 ctctcggagg gcctcctgca gaaggacagg acaaagcgcc tcggggccaa ggatgacttc
1081 atggagatta agagtcattg cttcttctcc ttaattaact gggatgatct cattaataag
1141 aagattactc ccccttttaa cccaaatgtg agtgggcca acgagctacg gcactttgac
1201 ccgagtttta ccgaagagcc tgtcccaac tccattgga agtccctga cagcgtcctc
1261 gtcacagcca gcgtcaagga agctgccgag gctttctag gcttttcta tgcgcctccc
1321 acggactcct tcctctgaac cctgttaggg cttggtttta aaggatttta tgtgtgttcc
1381 cgaatgtttt agttagcctt ttggtggagc cgccagctga caggacatct tacaagagaa
1441 tttgcacatc tctggaagct tagcaatcct attgcacact gttcgttga attttttgaa
1501 gagcacattc tcctcagtga gtcattgagg ttttcatttt tattcttctc tccaactggg
1561 tgctatctct gaaacgagcg ttagagtgc gccttagacg gaggcaggag tttcgttaga
1621 aagcggaact gttctaaaaa aggtctcctg cagatctgtc tgggctgtga tgacgaatat
1681 tatgaaatgt gccttttctg aagagattgt gttagctcca aagcttttcc tatcgagtg
1741 tttcagttct ttattttccc ttgtggatat gctgtgtgaa ccgtcgtgtg agtgtggtat
1801 gcctgatcac agatggattt tgttataagc atcaatgtga cacttgagg acactacaac
1861 gtgggacatt gtttgtttct tccatatttg gaagataaat ttatgtgtag acttttttgt
1921 aagatacggg taataactaa aatttattga aatggctctg caatgactcg tattcagatg
1981 cctaaagaaa gcattgctgc taaaaatatt tctattttta gaaaggggtt ttatggacca
2041 atgccccagt tgctcagtcag agcgttgggt gtttttcatt gtttaaaatg tcacctgtaa
2101 aatgggcatt atttatgttt ttttttttgc attcctgata attgtatgta ttgtataaag
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2161 aacgtctgta cattgggtta taacactagt atatttaaac ttacaggett atttgtaatg
2221 taaaccacca ttttaatgta ctgtaattaa catggttata atacgtacaa tccttccctc
2281 atcccatcac acaacttttt ttgtgtgtga taaactgatt ttggtttgca ataaaacctt
2341 gaaaaataaa aaaaaaaaaa aaaaaaaaaa

Fig. 2

SEQ ID No.2 (hs SGK2, cds)

```
1   atgggttcag actttatgcc ctgaaaagat ccttcacagc ctggccatct tggacttctg
61  gagctacocct ggctcacagg ggtcttgttg ccttgggtgt cccagttctt tgaaaagaat
121 cagcctggga ggggcccacac cctgaccatc cccctttatc ccttctgaga tgtttgttag
181 gaagtctggg tccaggggat atcatttctt gttccatcca tgcaggggtt gcttacctcg
241 ggtaggaaac cctcaggcgg tggcagggtg acaggtaggg gaggatggag agggcagtg
301 tgctgaagc cctggatggg cggagctgac cccccaacac caactctatc atgcctgctc
361 ctccctgtcc cccagagctt gctgatcat tgctacagaa tgaactctag cccagctggg
421 accccaagtc cacagccctc cagggccaat ggggaacatc acctggggcc ttcagccaac
481 ccaaatgccc agcccacgga cttcgacttc ctcaaagtca tcggcaaagg gaactacggg
541 aaggctctac tggccaagcg caagtctgat ggggcttct atgcagtga ggtactacag
601 aaaaagtcca ttttaaagaa gaaagagcag agccacatca tggcagagcg cagtgtgctt
661 ctgaagaacg tgggcacccc cttcctctgt ggctgctgct actccttcca gacacctgag
721 aagctctact tctgtctoga ctatgtcaac gggggagagc tcttcttcca cctgcagcgg
781 gagcgccggt tcttgagccc cggggccagg ttctacgctg ctgaggtggc cagcgccatt
841 ggctacctgc actccctcaa catcatttac agggatctga aaccagagaa cattctcttg
901 gactgccagg gacacgtggt gctgacggat tttggcctct gcaaggaagg ttagagcctt
961 gaagacacca catccacatt ctgtgttacc cctgagtact tggcacctga agtgcttcgg
1021 aaagagcctt atgatcgagc agtggactgg tgggtgcttg gggcagtcct ctacgagatg
1081 ctccatggcc tggcgccctt ctacagccaa gatgtatccc agatgtatga gaacattctg
1141 caccagccgc tacagatccc cggagggcgg acagtggccg cctgtgacct cctgcaaaag
1201 cttctccaca aggaccagag gcagcggctg ggctccaaag cagactttct tgagattaa
1261 aacctgtat tcttcagccc cataaactgg gatgacctgt accacaagag gctaactcca
1321 ccttcaacc caaatgtgac aggacctgct gacttgaagc attttgacc agagtccac
1381 caggaagctg tgtccaagtc cattggctgt acccctgaca ctgtggccag cagctctggg
1441 gcctcaagt cattctctgg attttcttat ggcagaggg atgatgacat cttggattgc
1501 tagaagagaa ggacctgtga aactactgag gccagctggt attagtaagg aattaccttc
1561 agctgctagg aagagcgact caaactaaca atggtctcaa cgagaagcag gtttattttt
1621 tccagcacat aaaagaaaaa taatgtttcg gagtccagga ctggcaggac aggtcatcag
1681 atactcagag gctgtatctc tgcctgcca accttgacaa atggttcca atgttaggtt
1741 tgctacaaga tggttactgg agctctagct gcctattttg tgtttaggga agggaaaatg
1801 gaggaagggg gagaagagca aaggggcctt ttaaagagct ttcccaaaag cccccccaa
1861 tgacttttgc ttccatctca ctaaccaccc acccctacct ggaatggagg ctgggaaatg
1921 tggtatttt gctgggtacg tgactatccc taataacaaa ggggttttga cctaagaca
1981 ttaggggaga atgttgggta ggcagccagc cctcttttac catagggcct cctggtgttt
2041 ggattttgat ctcaatgtgt aaaatgacag agatgtaaca agctcatagg gtatcaatat
2101 ctottattgt tctatgttga aaaaaaaaaa aaaaaaaaaa aaaaaa
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Fig. 3

SEQ ID No.3 (hs SGK 3, cds)

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1   ctgctgactg tttcttcgga tgcatttttt ggtgtgctct tgagggatta aatgcaaaga
61  gatcacacca tggactacaa ggaaagctgc ccaagtgtaa gcattcccag ctccgatgaa
121 cacagagaga aaaagaagag gtttactgtt tataaagttc tggtttcagt gggaagaagt
181 gaatggtttg tcttcaggag atatgcagag gttgataaac ttataaacac tttaaaaaaa
241 cagttttctg ctatggccct gaagattcct gccaaagaaa tatttggtga taattttgat
301 ccagatttta ttaaacaaaag acgagcagga ctaaaccgaat tcattcagaa cctagttagg
361 tatccagaac ttataacca tccagatgtc agagcattcc ttcaaatgga cagtccaaaa
421 caccagtcag gtccatctga agatgaggat gaaagaagtt ctcagaagct acactctacc
481 tcacagaaca tcaacctggg acogtctgga aatcctcatg ccaaaccaac tgactttgat
541 ttcttaaaaag ttattggaaa aggcagcttt ggcaagggtc ttcttgcaaa acggaaaactg
601 gatggaaaag tttatgctgt caaagtgtta cagaaaaaaa tagttctcaa cagaaaagag
661 caaaaacata ttatggctga acgtaatgtg ctcttgaaaa atgtgaaaca tccgtttttg
721 gttggattgc attattcctt ccaacaact gaaaagcttt atttgttct ggattttgtt
781 aatggagggg agcttttttt ccacttacia agagaacggt cctttcctga gcacagagct
841 aggtttttac ctgctgaaat tgctagtgtc ttgggttact tacattccat caaaatagta
901 tacagagact tgaaaccaga aaatattctt gtggattcag taggacatgt tgtcttaaca
961 gattttgggc tttgtaaaga aggaattgct atttctgaca ccactaccac attttgtggg
1021 acaccagagt atcttgacc tgaagtaatt agaaaacagc octatgacaa taccgtagat
1081 tgggtgggtgc ttggggctgt tctgtatgaa atgctgtatg gattgcctcc tttttattgc
1141 cgagatgttg ctgaaatgta tgacaatatc cttcaciaac ccctaagttt gaggccagga
1201 gtgagtctta gagcctggtc cattctggaa gaactoctag aaaaagacag gcaaaatcga
1261 cttggtgcca aggaagactt tcttgaaatt cagaatcatc ctttttttga atcactcagc
1321 tgggtgacc ttgtacaaaa gaagattcca ccaccattta atcctaagt gggtggacca
1381 gatgatatca gaaactttga cacagcattt acagaagaaa cagttccata ttctgtgtgt
1441 gtatcttctg actattctat agtgaatgcc agtgtattgg aggcagatga tgcattcgtt
1501 ggtttctctt atgcacctcc ttcagaagac ttatttttgt gagcagttgc catcacagaaa
1561 ccattgagca aaataagtct atagatggga ctgaaacttc tatttggtgt aatatattca
1621 aatatgtata actagtgcct catttttata tgtaatgatg aaaactatga aaaaatgtat
1681 tttcttctat gtgcaagaaa aatagggcat ttcaaagagc tgttttgatt aaaatttata
1741 ttcttgttta ataagcttat ttttaacaaa tttaaaagct attattctta gcattaacct
1801 atttttaaag aaaccttttt gctattgact gttttttccc tctaagttta cactaacatc
1861 tacccaagat agactgtttt ttaacagtca atttcagttc agctaacata tattaatacc
1921 tttgtaactc ttgtctatgg cttttgttat cacaccaaaa ctatgcaatt ggtacatggg
1981 tgtttaagaa gaaaccgtat tttccatga taaatcactg ttgaaatat ttggtcatgg
2041 tatgatcgaa atgtaaaagc ataattaaca cattggctgc tagttaacaa ttggaataac
2101 tttattctgc agatcattta agaagtaaca ggccggggcg ggttgtcac gcctgtaatc
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2161 ccagcactttt gggaggctga ggcgggcaga tcacctgagg tcaggagttg gagaccagcc
2221 tgaccaacat ggacaaaccc cgtctctact aaaaatacaa aattggcagg gtgtgggtgca
2281 catgectata atcccagcta cttggggagc taaggcagga gaatcgcttg aaccggggag
2341 gcgagggttg cagtgcgcg agatcgacc attgcactcc tgcctgggca acaagagtga
2401 aactccatct ccaaaaaaaaa aaaggaaaaa gtaacaaaag gaaattattt gtttttga
2461 taccagttca actttgtgga ttatttttcc tctgaaggaa aagaaaaggc ttaatggta
2521 ggatttttaa gtattcccaa agatctgaag ggtaataaaa tgtactggat tttttaagg
2581 ggtaccacaaa atgaatgtct gtcataatatt tatattacaa atacattata tttatgttct
2641 attcatcttt tgaatgttta gtatgtatt aagtcattct gaatctttgt atttgccttt
2701 gcaaataagg ttttcaaagc tcttttcccta actgggtaag taaaataaaa aattgagctt
2761 tctagaatat ttgcctaatt gggaattaaa aagtaaaata ataggccagg catggtggct
2821 catgectata agcaccctgg gaggcggagg caggcagatt atttgagctc aggagttga
2881 gaccatcctg ggcaacatgg cgaaacccta tctctacaaa aaatacaaaa attagccaga
2941 catggtggca catgecttta gtcccagcta ctcaggaggc tgaagtggga ggatggcttg
3001 agcccacgag atggaagttg cagtgaactg aaattgtgcc actgcacttt tcagcctggg
3061 tgccacagcg agaccctagt taagagaaaa aaaaagttaa acaaaattgt gggcctaaagt
3121 aaatgtatac agttttatta caatgtaaca aaagtgaag atcggggccg gaatttatcc
3181 aatttcagat atatcttaga aaaagcacag gaaacagacc ttaaaattgt aacctacca
3241 ctaacttaca tgcttataaa agtaaaggag aataactggc cgggcacggg ggctcatgcc
3301 tataaaattc cagcactttg ggaggccaag gcaggaggat cacttgagcc tatgagttca
3361 agaccagcct aggcaatgta gtgacacctc atttctattt attttaaaaa aaagagagag
3421 taactacaga agaactttaa aaaataaaaa ataagcttac cttggattct tggcttagag
3481 tagaggtttt ttttaagtta tggaggaaac atttttgaag aagttaattg acccacttta
3541 gatgctccaa gaacaagcat cccttccatg tatgtcttga gaaagaaatc acagaagcat
3601 ttctcaccaa tactctttgg cttaaaatgt tcagcagaat tgggcagtg ggggtgacttt
3661 tcttatatta ataatttta catccaatac actgaatctt ccttttagag taagacttta
3721 atatctatac tgtaaatatt tgggtttattt ggcactactg taagttttgt ttttcacaaa
3781 gctcttatta tgaagcaaaa taaaaattct agtttcttgt atgatttttt gtactcatc
3841 attctgttta agctgcaaaa aattaaagtg caatattgta tatttttaag aacaaattta
3901 aaatagaatt ttgatgttcc tcagatcaca agaaatacaa atctatatag tataataaaa
3961 tcagcaaaag atcaaaaaaa aaaa

Fig. 4

SEQ ID No.4 (hs SGK 1)

MTVKTEAAKGILTYSRMRGMVAILIAFMKQRRMGLNDFIQKIAN
NSYACKHPEVQSILKISQPQEPELMNANPSPPPSPSQINLGPSSNPHAKPSDFHFLK
VIGKGSFGKVLLARHKAEVIFYAVKVLQKKAILKKKEEKHIMSERNVLLKNVKHPFLV
GLHFSFQTADKLYFVLDDYINGGELFYHLQRECFLEPRARFYAAEIASALGYLHSLNI
VYRDLKPENILLDSQGHIVLTDGFLCKENIEHNSTTSTFCGTPEYLAPEVLHKQPYDR
TVDWWCLGAVLYEMLYGLPPFYSRNTAEMYDNILNKPLQLKPNITNSARHLLEGLLQK
DRTKRLGAKDDFMEIKSHVFFSLINWDDLINKKITPPFNPNVSGPNELRHFDPEFTEE
PVPNSIGKSPDSVLVTASVKEAAEAFLGFSYAPPTDSFL

Fig. 5

SEQ ID No.5 (hs SGK 2)

*SGK2 β

M*QGLLTSGRKPSGGGRCTGRGGWRGQWCLKPWMGGADPPTPTLS

*SGK2 α

CLLLPVPPPEL PDHCYRM*NSSPAGTPSPQPSRANGNINLGPSANPNAQPTDFDFLKVIG
KGNYGKVLLAKRKSDGAFYAVKVLQKKSILKKKEQSHIMAERSVLLKNVRHPFLVGLR
YSFQTPEKLYFVLDYVNGGELFFHLQRERRFLEPRARFYAAEVASAIGYLHSLNIIYR
DLKPENILLDCQGHVVLTDGFLCKEGVEPEDTTSTFCGTPEYLAPEVLRKEPYDRAVD
WWCLGAVLYEMLHGLPPFYSQDVSQMYENILHQPLQIPGGRTVAACDLLQSLHDKDQR
QRLGSKADFLEIKNHVFFSPINWDDLYHKRLTPPFNPNVTGPADLKHFDPEFTQEAVS
KSGCTPDTVASSSGASSAFLGFSYAPEDDDIILDC

Fig. 6

SEQ ID No.6 (hs SGK3)

MQRDHTMDYKESCPSVSIPSSDEHREKKRFTVYKVLVSVGRSE
WVFVRRYAEDVKLYNTLKKQFPAMALKIPAKRIFGDNFDPDFIKORRAGLINEFIQNLV
RYPELYNHDPDVR AFLQMDSPKHQSGPSEDEDERSSQKLHSTSONINLGPSGNPHAKPT
DFDFLKVIGKGSFGKVLLAKRKLDGKVYAVKVLQKKIVLNRKEQKHIMAERNVLLKNV
KHPFLVGLHYSFQTTTEKLYFVLDFVNGGELFFHLQRRERSFPEHRARFYAAELASALGY
LHSIKIVYRDLKPENILVDSVGHVVLTD FGLCKEGIAISDTTTTFCGTPEYLAPEVIR
KQPYDNTVDWWCLGAVLYEMLYGLPPFYCRDVAEMYDNILHKPLSLRPGVSLRAWSIL
EELLEKDRQNRLGAKEDFLEIQNHPPFFESLSWADLVQKKIPPPFPNPNVAGPDDIRNED
TAFTEETVPYSVCVSSDYSTVNASVLEADDAFVGFSYAPPSDDLFL

Fig. 7

Functional fragments of human SGK subtypes 1, 2 and 3

Fig. 7a

SEQ ID No. 7 (hsSGK 1)

```
1   tttcacttct tgaaagtgat cggaaagggc agttttggaa aggttcttct agcaagacac
61  aaggcagaag aagtgttcta tgcagtcaaa gttttacaga agaaagcaat cctgaaaaag
181 aaagaggaga agcatattat gtoggagcgg aatgttctgt tgaagaatgt gaagcaccct
241 ttcttggtgg gccttcactt ctctttccag actgctgaca aattgtactt tgtcctagac
301 tacattaatg gtggagagtt gttctaccat ctccagaggg aacgctgctt cctggaacca
361 cgggctcggt tctatgctgc tgaatagacc agtgccttgg gctacctgca ttcactgaac
421 atcgtttata gagacttaaa accagagaat attttgctag attcacaggg acacattgtc
481 cttactgact tcggactctg caaggagAAC attgaacaca acagcacaac atccaccttc
541 tgtggcacgc cggagtatct cgcacctgag gtgcttcata agcagcctta tgacaggact
601 gtggactggt ggtgcctggg agctgtcttg tatgagatgc tgtatggcct gcgcctttt
661 tatagccgaa acacagctga aatgtacgac aacattctga acaagcctct ccagctgaaa
721 ccaaattatta caaattccgc aagacacctc ctggagggcc tcctgcagaa ggacaggaca
781 aagcggctcg gggccaagga tgacttcatg gagattaaga gtcattgtctt cttctcctta
841 attaatggg atgatctcat taataagaag attactcccc cttttaaccc aaatgtgagt
901 gggccc
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Fig. 7b

SEQ ID No. 8 (hsSGK 2)

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1   gacttcgact tcctcaaagt catcggcAAA gggaactacg ggaaggctct actggccaag
61  cgcaagtctg atggggcggt ctatgcagtg aaggtaactac agaaaaagtc catcttaaag
121 aagaaagagc agagccacat catggcagag cgcagtgtgc ttctgaagaa cgtgcggcac
181 cccttctctg tgggcctgcg ctactccttc cagacacctg agaagctcta cttcgtgctc
241 gactatgtca acgggggaga gctcttcttc cacctgcagc gggagcgcgc gttcctggag
301 ccccgggcca ggttctacgc tgcagaggtg gccagcgcca ttggetacct gcactccctc
361 aacatcattt acagggatct gaaaccagag aacattctct tggactgcca gggacacgtg
421 gtgctgacgg attttgccct ctgcaaggaa ggtgtagagc ctgaagacac cacatccaca
481 ttctgtggta ccctgagta ctggcacct gaagtgtctc ggaagagacc ttatgatcga
541 gcagtggact ggtggtgctt gggggcagtc ctctacgaga tgctccatgg cctgccgccc
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10/16

601 ttctacagcc aagatgtatc ccagatgtat gagaacattc tgcaccagcc gctacagatc
661 cccggaggcc ggacagtggc cgcctgtgac ctcctgcaa gccttctcca caaggaccag
721 aggcagcggc tgggctccaa agcagacttt cttgagatta agaaccatgt attcttcagc

Fig. 7c

SEQ ID No. 9 (hsSGK 3)

1 actttgattt cttaaaagtt attggaaaag gcagctttgg caaggttctt cttgcaaaac
61 ggaaactgga tggaaaatth tatgctgtca aagtgttaca gaaaaaata gttctcaaca
121 gaaaagagca aaaacatatt atggctgaac gtaatgtgct cttgaaaaat gtgaaacatc
181 cgttttttgg tggattgcat tattccttcc aaacaactga aaagctttat ttgtttctgg
241 attttgttaa tggaggggag ctttttttcc acttacaag agaacgggcc tttcctgagc
301 acagagctag gttttaogct gctgaaattg ctagtgcatt gggttactta cattccatca
361 aaatagtata cagagacttg aaaccagaaa atattctttt ggattcagta ggacatgttg
421 tottaacaga ttttgggctt tgtaaagaag gaattgctat ttctgacacc actaccacat
481 tttgtgggac accagagtat cttgcacctg aagtaattag aaaacagccc tatgacaata
541 ctgtagattg gtggtgcctt ggggctgttc tgtatgaaat gctgtatgga ttgctcctt
601 tttattgccg agatgttgct gaaatgtatg acaatatcct tcacaaaccc ctaagtttga
661 ggccaggagt gactcttaca gcctggtcca ttctggaaga actcctagaa aaagacaggc
721 aaaatcgact tggtgccaag gaagactttc ttgaaattca gaatcatcct ttttttgaat

Fig. 7d

SEQ ID No.10 (hsSGK1)

SDFHFLKVIKGSFQKVLARHKAEEVFYAVKVLQKKAILKKKEEKHIMSERNVLLKNVK
HPFLVGLHFSFQTADKLYFVLDYINGGELFYHLQRRERCFLEPRARFYAAEIASALGYLHS
LNIVYRDLKPENILLDSQGHIVLTDPLCKENIEHNSTTSTFCGTPEYLAPEVLHKQPYD
RTVDWWCLGAVLYEMLYGLPPFYSRNTAEMYDNILNKPLQLKPNITNSARHLLLEGLQKD
RTKRLGAKDDFMEIKSHVFF

Figur 7e

SEQ ID No. 11 (hsSGK2)

TDFDFLKVIKGNYGKVLAKRKSDGAFYAVKVLQKKSILKKKEQSHIMAERSVLLKNVR
HPFLVGLRYSFQTPEKLYFVLDYVNGGELFFHLQRRERFLEPRARFYAAEVASAIGYLHS

LNIIYRDLKPENILLDCQGHVVLTD FGLCKEGVEPEDTTSTFCGTPEYLAPEVLRKEPYD
RAVDWWCLGAVLYEMLHGLPPFYSQDVSQMYENILHQPLQIPGGRTVAACDLLQSLHHD
QRQLGSKADFLEIKNHVFF

Fig. 7f

SEQ ID No. 12 (hsSGK3)

TDFDFLKVIGKGSFGKVLLAKRKLDGKVYAVKVLQKKIVLNRKEQKHIMAERNVLLKNV
KHPFLVGLHYSFQTTEKLYFVLDFVNGGELFFHLQRERSFPEHRARFYAAEIASALGYL
HSIKIVYRDLKPENILVDSVGHVVLTD FGLCKEGIAISDTTTTFCGTPEYLAPEVIRKQ
PYDNTVDWWCLGAVLYEMLYGLPPFYCRDVAEMYDNILHKPLSLRPGVSLRAWSILEEL
LEKDRQNRLGAKEDFLEIQNHPPF

Fig. 8

SEQ ID No. 13 (mSGK 1)

ggcacatcgt cctcactgac tttgggctct gcaaagagaa tattgagcat aacgggacaa
catctacctt ctgtggcacg cctgagtatc tggctcctga ggtcctccat aaacagccgt
atgaccggac ggtggactgg tgggtgtcttg gggctgtcct gtatgagatg ctctacggcc
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cagcagaagc cttcctcggc ttctctatg cacctcctgt ggattccttc ctctgagtgc
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Fig. 9: Expression of SGK-1 and SN1 (Slc38A3) mRNA in hypertrophic cartilage cells

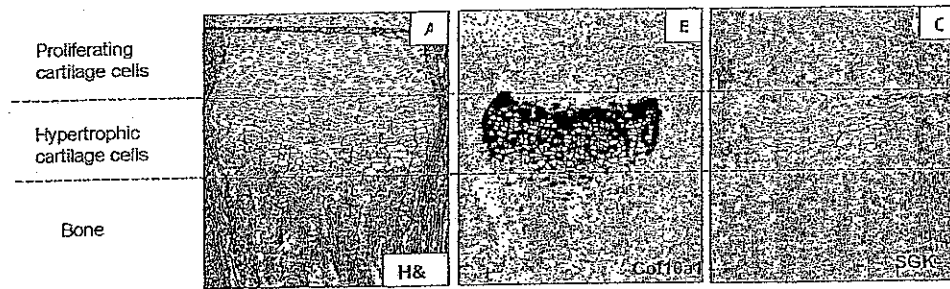


Fig. 10: Comparison of SGK-1 and Col10a1 mRNA expression in ATDC5 cells in various stages of differentiation.

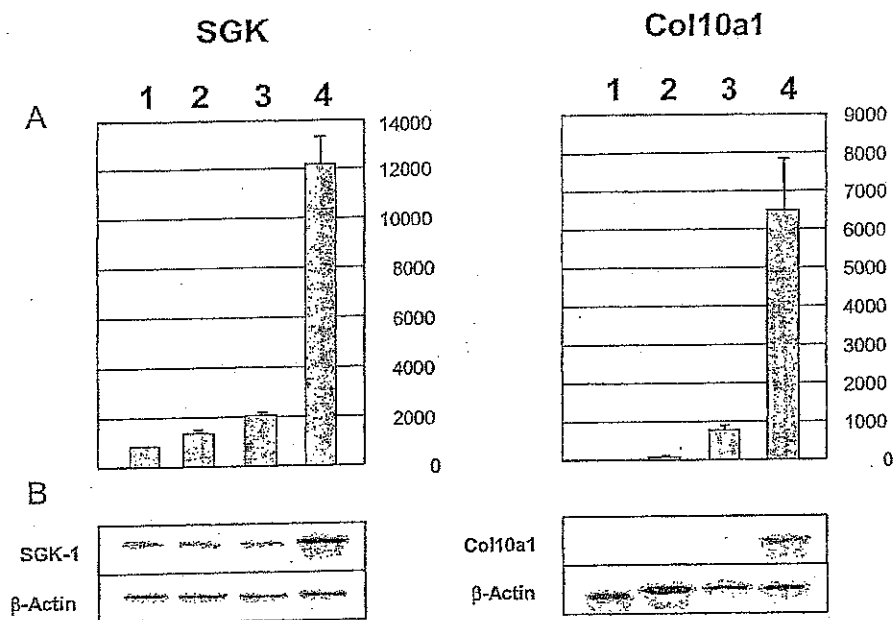


Fig. 11: Virally transduced ATDC5 cells for stable overexpression of SGK-1.

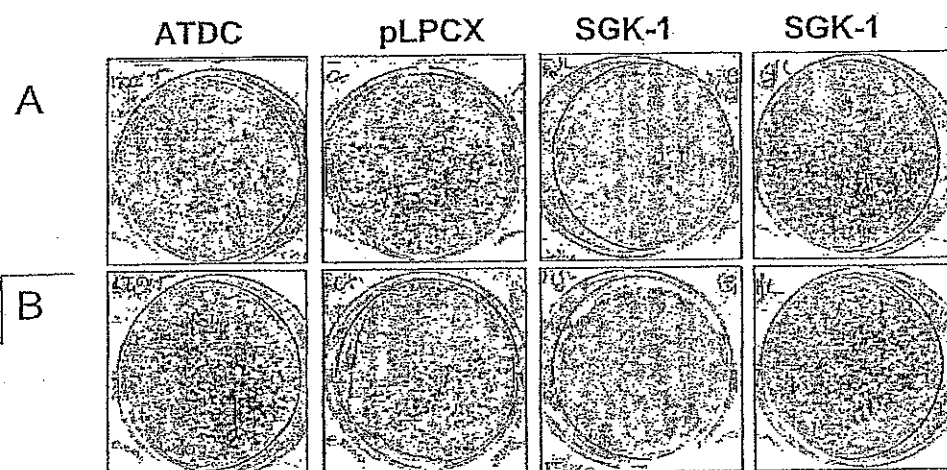


Fig. 12: Analysis of proteoglycan expression

