

Fig. 1

LINKER #1 15bp | SV40 ORIGIN = 332bp
 GACGTCGCGG CCGCTCTAGG CCTCCAAAA AGCCTCCTCA CTACTTCTGG AATAGCTCAG 60
 AGGCCGAGGC GGCCTCGGCC TCTGCATAAA TAAAAAAAT TAGTCAGCCA TGCATGGGGC 120
 GGAGAATGGG CGGAAC TGGG CGGAGTTAGG GCGGGGATGG GCGGAGTTAG GGGCGGGACT 180
 ATGGTTGCTG ACTAATTGAG ATGCATGCTT TGCATACTTC TGCTGCTGG GGAGCCTGGG 240
 GACTTTCCAC ACCTGGTTGC TACTAATTG AGATGCATGC TTTGCATACT TCTGCCTGCT 300
 GGGGAGCCTG GGGACTTTCC ACACCCTAAC TGACACACAT TCCACAGAAAT TAATTCCCCT 360
 AGTTATTAAT AGTAATCAAT TACGGGGTCA TTAGTTCATA GCCCATATAT GGAGTTCGGC 420
 GTTACATAAC TTACGGTAAA TGGCCCGCCT GGCTGACCGC CCAACGACCC CCGCCATTG 480
 CMV PROMOTOR-AMPLIFICATOR DE GENE = 567bp
 ACGTCAATAA TGACGTATGT TCCCATAGTA ACGCCAATAG GGACTTTCCA TTGACGTCAA 540
 TGGGTGGACT ATTTACGGTA AACTGCCAC TTGGCAGTAC ATCAAGTGTA TCATATGCCA 600
 AGTACGCCCC CTATTGACGT CAATGACGGT AAATGGCCCG CCTGGCATTG TGCCAGTAC 660
 ATGACCTTAT GGGACTTTCC TACTTGGCAG TACATCTACG TATTAGTCAT CGCTATTACC 720
 ATGGTGATGC GGTTTTGGCA GTACATCAAT GGGCGTGGAT AGCGGTTTGA CTCACGGGGA 780
 TTTCCAAGTC TCCACCCCAT TGACGTCAAT GGGAGTTTGT TTTGGCACCA AAATCAACGG 840
 GACTTTCCAA AATGTCGTAA CAACTCCGCC CCATTGACGC AAATGGGCGG TAGGCGTGTA 900
 CGGTGGGAGG TCTATATAAG CAGAGCTGGG TACGTGAACC GTCAGATCGC CTGGAGACGC 960
 Bgl II | LINKER #3 = 76bp | CONDUCTOR = 60bp^R
 CATCACAGAT CTCTACCAT GAGGGTCCCC GCTCAGCTCC TGGGGCTCCT GCTGCTCTGG 1020
 CTCCCAGGTG CACGATGTA TGGTACCAAG GTGGAATCA AACGTACGGT GGCTGCACCA 1080
 TCTGTCTTCA TCTTCCCGCC ATCTGATGAG CAGTTGAAAT CTGGAAGTGC CTCTGTTGTG 1140
 TGCTGCTGA ATAATTCTA TCCAGAGAG GCCAAAGTAC AGTGAAGGT GGATAACGCC 1200
 CONSTANTA UMANĂ KAPA 324bp 107 AMINOACID și STOP CODON
 CTCCAATCGG GTAACCTCCA GGAGAGTGTC ACAGAGCAGG ACAGCAAGGA CAGCACCTAC 1260
 AGCCTCAGCA GCACCCTGAC GCTGAGCAA GCAGACTACG AGAAACACAA AGTCTACGCC 1320
 TGCGAAGTCA CCCATCAGGG CCTGAGCTCG CCCGTCACAA AGAGCTTCAA CAGGGGAGAG 1380
 STOPAREA
 CATENEI
 UȘOARE | Eco RI | LINKER #4 = 85bp
 TGTGGAATTC AGATCCGTTA ACGGTTACCA ACTACCTAGA CTGGATTCGT GACAACATGC 1440
 GGCCGTGATA TCTACGTATG ATCAGCCTCG ACTGTGCCTT CTAGTTGCCA GCCATCTGTT 1500

Fig. 2

GTTTGCCCCT CCCCCGTGCC TTCCTTGACC CTGGAAGGTG CCACTCCCAC TGTCTTTTCC 1560
 TAATAAAATG AGGAAATTGC ATCGCATTGT CTGAGTAGGT GTCATTCTAT TCTGGGGGGT 1620
 GGGGTGGGGC AGGACAGCAA GGGGGAGGAT TGGGAAGACA ATAGCAGGCA TGCTGGGGAT 1680
 GCGGTGGGCT CTATGGAACC AGCTGGGGCT CGACAGCITAT GCCAAGTACG CCCCCTATTG 1740
 ACGTCAATGA CGGTAATGG CCCGCCTGGC ATTATGCCCA GTACATGACC TTATGGGACT 1800
 TTCCTACTTG GCAGTACATC TACGTATTAG TCATCGCTAT TACCATGGTG ATGCGGTTTT 1860
 GGCAGTACAT CAATGGGCGT GGATAGCGGT TTGACTCACG GGGATTCCA AGTCTCCACC 1920
 CCATTGACGT CAATGGGAGT TTGTTTTGGC ACCAAAATCA ACGGGACTTT CAAAATGTC 1980
 GTAACAATC CGCCCCATTG ACGCAAATGG GCGGTAGGCG TGTACGGTGG GAGGTCTATA 2040
 TAAGCAGAGC TGGGTACGTC CTCACATTCA GTGATCAGCA CTGAACACAG ACCCGTCCGAC 2100
 ATGGGTTGGA GCCTCATCTT GCTCTTCCT GTCGCTGTTG CTACCGGTGT GCTAGCACC 2160
 STARTUL CATENEI GRELE CONDUCTOR=51bp Mlu I 2151 | 2 Nhe I
 -5 -4 -3 114 115
 AAGGGCCCAT CGGTCTTCCC CCTGGCACCC TCCTCCAAGA GCACCTCTGG GGGCACAGCG 2220
 GCCCTGGGCT GCCTGGTCAA GGACTACTTC CCCGAACCGG TGACGGTGTC GTGGAActCA 2280
 GGGCCCTGA CCAGCGGCGT GCACACCTTC CCGGCTGTCC TACAGTCCIC AGGACTCFAc 2340
 TCCCTCAGCA GCGTGGTGAC CGTGCCCTCC AGCAGCTTGG GCACCCAGAC CTACATCTGC 2400
 AACGTGAATC ACAAGCCCAG CAACACCAAG GTGGACAAGA AAGCAGAGCC CAAATCTTGT 2460
 GACAAAATC ACACATGCCC ACCGTGCCCA GCACCTGAAC TCCTGGGGGG ACCGTcAGTC 2520
 TTCCTCTTCC CCCAAAACC CAAGGACACC CTCATGATCT CCCGGACCCC TGAGGTcACA 2580
 TGGTGGTGG TGGACGTGAG CCACGAAGAC CCTGAGGTCA AGTTCAACTG GTACGTGGAC 2640
 GCGTGGAGG TGCATAATGC CAAGACAAAG CCGCGGGAGG AGCAGTACAA CAGCACGTAC 2700
 CGTGTGGTCA GCGTCCCTCAC CGTCCTGCAC CAGGACTGGC TGAATGGCAA GGAActACAAG 2760
 TGCAAGGTCT CCAACAAAGC CCTCCCAGCC CCCATCGAGA AAACCATCTC CAAAGCCAAA 2820
 GGGCAGCCCC GAGAACCACA GGTGTACACC CTGCCCCCAT CCCGGGATGA GCTGACCAGG 2880
 AACCAGGTCA GCCTGACCTG CCTGGTCAAA GGCTTCTATC CCAGCGACAT CGCCGTGGAG 2940
 TGGGAGAGCA ATGGGCAGCC GGAGAACAAC TACAAGACCA CGCCTCCCCT GCTGGACTCC 3000

Fig. 3

GACGGCTCCT TCTTCCTCTA CAGCAAGCTC ACCGTGGACA AGAGCAGGTG GCAGCAGGGG 3060
 AACGTCTTCT CATGCTCCGT GATGCATGAG GCTCTGCACA ACCACTACAC GCAGAAGAGC 3120
 STOPAREA CATENEI GRELE Bam HI LINKER #7=81bp
 CTCTCCCTGT CTCCGGGTAA ATGAGGATCC GTTAACGGTT ACCAACTACC TAGACTGGAT 3180
 3144 15
 TCGTGACAAC ATGCGGCCGT GATATCTACG TATGATCAGC CTCGACTGTG CTTTCTAGTT 3240
 3225 16
 GCCAGCCATC TGTTGTTTGC CCCTCCCCCG TGCCTTCCTT GACCCTGGAA GGTGCCACTC 3300
 HORMON DE CREȘTERE BOVIN.REGIUNEA POLIADENILĂȚIEI =231bp
 CCACTGTCTT TTCCTAATAA AATGAGGAAA TTGCATCGCA TTGTCTGAGT AGGTGTCATT 3360
 CTATTCTGGG GGGTGGGGTG GGGCAGGACA GCAAGGGGGA GGATTGGGAA GACAATAGCA 3420
 GGCATGCTGG GGATGCGGTG GGCTCTATGG AACCAGCTGG GGCTCGACAG CGCTGGATCT 3480
 3456 17 LINKER #8=34bp
 CCCGATCCCC | AGCTTTGCTT CTCAATTCT TATTTGCATA ATGAGAAAAA AAGGAAAATT 3540
 3490 1
 AATTTAACA CCAATTCAGT AGTTGATTGA GCAAATGCGT TGCCAAAAAG GATGCTTTAG 3600
 PROMOTOR MAJOR AL HEMOGLOBINEI BETA DE ȘOARECE =368bp
 AGACAGTGTT CTCTGCACAG ATAAGGACAA ACATTATTCA GAGGGAGTAC CCAGAGCTGA 3660
 GACTCCTAAG CCAGTGAGTG GCACAGCATT CTAGGGAGAA ATATGCTTGT CATCACCGAA 3720
 GCCTGATTCC GTAGAGCCAC ACCTTGGTAA GGGCCAATCT GCTCACACAG GATAGAGAGG 3780
 GCAGGAGCCA GGGCAGAGCA TATAAGGTGA GGTAGGATCA GTTGCTCCTC ACATTTGCTT 3840
 CTGACATAGT TGTGTTGGGA GCTTGGATAG CTTGGACAGC TCAGGGCTGC GATTTTCGCGC 3900
 3856 17 LINKER #9=19bp 5' INTRANSLANT = 82 bp
 3875 16 START DHFR
 CAAACTTGAC GGCAATCCTA GCGTGAAGGC TGGTAGGATT TTATCCCCGC TGCCATCATG 3960
 3957 18
 GTTCGACCAT TGAAGTGCAT CGTCGCCGTG TCCAAAATA TGGGGATTGG CAAGAACGGA 4020
 GACCTACCTT GGCCTCCGCT CAGGAACGAG TTCAAGTACT TCCAAAGAAT GACCACAACC 4080
 TCTTCAGTGG AAGGTAAACA GAATCTGGTG ATTATGGGTA GGAAAACTG GTTCTCCATT 4140
 ȘOARECE =564bp=187 AMINOACID ȘI STOP CODON
 CCTGAGAAGA ATCGACCTTT AAAGGACAGA ATTAATATAG TTCTCAGTAG AGAACTCAA 4200
 GAACCACCAC GAGGAGCTCA TTTTCTTGCC AAAAGTTTGG ATGATGCCTT AAGACTTATT 4260
 GAACAACCGG AATTGGCAAG TAAAGTAGAC ATGGTTTGGG TAGTCGGAGG CAGTTCTGTT 4320
 TACCAGGAAG CCATGAATCA ACCAGGCCAC CTTAGACTCT TTGTGACAAG GATCATGCAG 4380
 GAATTTGAAA GTGACACGTT TTTCCCAGAA ATTGATTTGG GGAAATATAA ACTTCTCCCA 4440
 GAATACCCAG GCGTCTCTC TGAGGTCCAG GAGGAAAAAG GCATCAAGTA TAAGTTTGAA 4500

Fig. 4

STOP DHFR
 GTCTACGAGA AGAAAGAC TA ACAGGAAGAT GCTTTCAAGT TCTCTGCTCC CCTCCTAAAG 4560
 4521 2
 3' INTRASLANT DHFR=82bp LINKER #10=10bp
 TCATGCATTT TTATAAGACC ATGGGACTTT TGCTGGCTTT AGATCAGCCT CGACTGTGCC 4620
 4603 4 4613 4
 TTCTAGTTGC CAGCCATCTG TTGTTTGGCC CTCCCCCGTG CCTTCCTTGA CCCTGGAAGG 4680
 HORMON DE CREȘTERE BOVIN, REGIUNEA POLIADENILĂȚIEI =231bp
 TGCCACTCCC ACTGTCCCTT CTAATAAAAA TGAGGAAATT GCATCGCATT GTCTGAGTAG 4740
 GTGTCATTCT ATTCTGGGGG GTGGGGTGGG GCAGGACAGC AAGGGGGAGG ATTGGGAAGA 4800
 CAATAGCAGG CATGCTGGGG ATGCGGTGGG CTCTATGGAA CCAGCTGGGG CTGAGCTAC 4860
 4844 5 LINKER #11=17bp
 TAGCTTTGCT TCTCAATTC TTATTTGCAT AATGAGAAAA AAAGGAAAAT TAATTTTAAC 4920
 ACCAATTCAG TAGTTGATTG AGCAAATGCG TTGCCAAAAA GGATGCTTTA GAGACAGTGT 4980
 PROMOTOR MAJOR AL HEMOGLOBINEI BETA DE ȘOARECE =366bp
 TCTCTGCACA GATAAGGACA AACATTATTC AGAGGGAGTA CCCAGAGCTG AGACTCCTAA 5040
 GCCAGTGAGT GGCACAGCAT TCTAGGGAGA AATATGCTTG TCATCACCGA AGCCTGATTC 5100
 CGTAGAGCCA CACCTTGTA AGGGCCAATC TGCTCACACA GGATAGAGAG GGCAGGAGCC 5160
 AGGGCAGAGC ATATAAGGTG AGGTAGGATC AGTTGCTCCT CACATTTGCT TCTGACATAG 5220
 TTGTGTTGGG AGCTTGGATC GATCCTCTAT GGTGAACAA GATGGATTGC ACGCAGGTTT 5280
 5227 8 LINKER #12=21bp START NEO
 5248 9
 TCCGGCCGCT TGGGTGGAGA GGCTATTCGG CTATGACTGG GCACAACAGA CAATCGGCTG 5340
 CTCTGATGCC GCCGTGTTCC GGCTGTCAGC GCAGGGGCGC CCGGTTCTTT TTGTCAAGAC 5400
 TRANSFERARE FOSFORICĂ DE NEOMICINĂ
 CGACCTGTCC GGTGCCCTGA ATGAAGTGA GGACGAGGCA GCGCGGCTAT CGTGGCTGGC 5460
 795bp=264 AMINOACID ȘI STOP CODON
 CACGACGGGC GTTCCTTGGC CAGCTGTGCT CGACGTTGTC ACTGAAGCGG GAAGGGACTG 5520
 GCTGCTATTG GGCGAAGTGC CGGGGCAGGA TCTCCTGTCA TCTCACCTTG CTCCTGCCGA 5580
 GAAAGTATCC ATCATGGCTG ATGCAATGCG GCGGCTGCAT ACGCTTGATC CGGCTACCTG 5640
 CCCATTCGAC CACCAAGCGA AACATCGCAT CGAGCGAGCA CGTACTCGGA TGGAAAGCCGG 5700
 TCTTGTCGAT CAGGATGATC TGGACGAAGA GCATCAGGGG CTCGCGCCAG CCGAACTGTT 5760
 CGCCAGGCTC AAGGCGCGCA TGCCCGACGG CGAGGATCTC GTCGTGACCC ATGGCGATGC 5820
 CTGCTTGCCG AATATCATGG TGGAAAATGG CCGCTTTTCT GGATTCATCG ACTGTGGCCG 5880
 GCTGGGTGTG GCGGACCGCT ATCAGGACAT AGCGTTGGCT ACCCGTGATA TTGCTGAAGA 5940
 GCTTGCGGGC GAATGGGCTG ACCGCTTCCT CGTGCTTTAC GGTATCGCCG CTCCCGATTC 6000

Fig. 5

GCAGCGCATC GCCTTCTATC GCCTTCTTGA CGAGTTCTTC TGAGCGGGAC TCTGGGGTTC 6060
 STOP NEO|
 6043 4
 GAAATGACCG ACCAAGCGAC GCCCAACCTG CCATCAGGAG ATTTCGATTC CACCGCCGCC 6120
 3' INTRANSLANT NEO=173bp
 TTCTATGAAA GGTGGGGCTT CGGAATCGTT TTCCGGGACG CCGGCTGGAT GATCCTCCAG 6180
 CGCGGGGATC TCATGCTGGA GTTCTTCGCC CACCCCAACT TGTATTATGC AGCTTATAAT 6240
 6216 7
 GGTTACAAAT AAAGCAATAG CATCACAAAT TTCACAAATA AAGCATTTTT TTCACTGCAT 6300
 SV40 POLI A INCEPATOR =133bp LINKER #13=19bp
 TCTAGTTGTG GTTTGTCCAA ACTCATCAAT CTATCTTATC ATGCTGGAT CGCGGCCGCC 6360
 6349 50
 ATCCCGTGA GAGCTTGCG TAATCATGGT CATAGCTGTT TCCTGTGTGA AATTGTTATC 6420
 6368 9
 CGCTCACAAT TCCACACAAC ATACGAGCCG GAAGCATAAA GTGTAAAGCC TGGGGTGCCT 6480
 AATGAGTGAG CTAAGTACA TTAATTGCGT TGCCTCACT GCCCGCTTTC CAGTCGGGAA 6340
 ACCTGTCTGT CCAGCTGCAT TAATGAATCG GCCAACGCGC GGGGAGAGGC GGTTCGCTA 6600
 PVC 19
 TTGGGCGCTC TTCCGCTTCC TCGCTCACTG ACTCGCTGCG CTCGGTCGTT CGGCTGCGGC 6660
 GAGCGGTATC AGCTCACTCA AAGGCGGTAA TACGGTTATC CACAGAATCA GGGGATAACG 6720
 CAGGAAAGAA CATGTGAGCA AAAGGCCAGC AAAAGGCCAG GAACCGTAAA AAGGCCGCT 6780
 6792= ORIGINE BACTERIANĂ A REPRODUCERII
 TGCTGGCGTT TTCCATAGG CTCCGCCCCC CTGACGAGCA TCACAAAAAT CGACGCTCAA 6840
 GTCAGAGGTG GCGAAACCCG ACAGGACTAT AAAGATACCA GCGGTTTCCC CCTGGAAGCT 6900
 CCCTCGTGCG CTCTCCTGTT CCGACCCTGC CGTTACCGG ATACCTGTCC GCCTTTCTCC 6960
 CTTCCGGGAAG CGTGGCGCTT TCTCAATGCT CACGCTGTAG GATCTCAGT TCGGTGTAGG 7020
 TCGTTGCTC CAAGCTGGGC TGTGTGCAGC AACCCCCCGT TCAGCCCGAC CGCTGCGCCT 7080
 TATCCGGTAA CTATCGTCTT GAGTCCAACC CGGTAAGACA CGACTTATCG CCACTGGCAG 7140
 CAGCCACTGG TAACAGGATT AGCAGAGCGA GGTATGTAGG CCGTGCTACA GAGTTCTTGA 7200
 AGTGGTGGCC TAACTACGGC TACTACTAGAA GGACAGTATT TGGTATCTGC GCTCTGCTGA 7260
 AGCCAGTTAC CTTCGGAAAA AGAGTTGGTA GCTCTTGATC CGGCAAACAA ACCACCGCTG 7320
 GTAGCGGTGG TTTTTTGTG TGCAAGCAGC AGATTACCGC CAGAAAAAAA GGATCTCAAG 7380
 AAGATCCTTT GATCTTTTCT ACGGGGTCTG ACGCTCAGTG GAACGAAAAC TCACGTTAAG 7440
 GGATTTTGGT CATGAGATTA TCAAAAAGGA TCTCACCTA GATCCTTTTA AATTA AAAAT 7500

Fig. 6

STOP LACTAMAZĂ BETA |
 GAAGTTTTAA ATCAATCTAA AGTATATATG AGTAAACTTG GTCTGACAGT TACCAATGCT 7560
 | 7550
 TAATCAGTGA GGCACCTATC TCAGCGATCT GTCTATTTTCG TTCATCCATA GTTGCCTGAC 7620
 TCCCCGTCGT GTAGATAACT ACGATACGGG AGGGCTTACC ATCTGGCCCC AGTGCTGCAA 7680
 TGATACCGCG AGACCCACGC TCACCGGCTC CAGATTTATC AGCAATAAAC CAGCCAGCCG 7740
 LACTAMAZĂ BETA =861bp
 GAAGGGCCGA GCGCAGAAGT GGTCTGCAA CTTTATCCGC CTCCATCCAG TCTATTAATT 7800
 286 AMINOACID si STOP CODON
 GTTGCCGGGA AGCTAGAGTA AGTAGTTCGC CAGTTAATAG TTTGCGCAAC GTTGTGGCC 7860
 TTGCTACAGG CATCGTGGTG TCACGCTCGT CGTTTGGTAT GGCTTCATTC AGCTCCGGTT 7920
 CCCAACGATC AAGGCGAGTT ACATGATCCC CCATGTTGCG CAAAAAAGCG GTTAGCTCCT 7980
 TCGGTCCTCC GATCGTTGTC AGAAGTAAGT TGGCCGCAGT GTTATCACTC ATGGTTATGG 8040
 CAGCACTGCA TAATTCTCTT ACTGTCATGC CATCCGTAAG ATGCTTTTCT GTGACTGGTG 8100
 AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCGGCG ACCGAGTTGC TCTTGCCCGG 8160
 CGTCAATACG GGATAATACC GCGCCACATA GCAGAAC TTT AAAAGTGCTC ATCATTGGAA 8220
 AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCGCT GTTGAGATCC AGTTCGATGT 8280
 AACCCACTCG TGCACCCAAC TGATCTTCAG GATCTTTTAC TTTACCAGC GTTTCTGGGT 8340
 GAGCAAAAAC AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT 8400
 STARTUL LACTAMAZEI BETA
 GAATACTCAT ACTCTTCCTT TTTCAATATT ATTGAAGCAT TTATCAGGGT TATTGTCTCA 8460
 | 8410
 TGAGCGGATA CATATTTGAA TGTATTTAGA AAAATAAACA AATAGGGGTT CCGCGCACAT 8520
 TTCCCCGAAA AGTGCCACCT

Fig. 7

LINKER #1=15bp |
 GACGTCGCGG CCGCTCTAGG CCTCCAAAAA AGCCTCCTCA CTA CTCTCTGG AATAGCTCAG 60
 15 6
 AGGCCGAGGC GGCCTCGGCC TCTGCATAAA TAAAAAAAT TAGTCAECCA TGCATGGGGG 120
 SV40 ORIGINE = 332bp
 GGAGAATGGG CGGAAGTGGG CGGAGTTAGG GCGGGGATGG GCGGAGTTAG GGGCGGGACT 180
 ATGGTTGCTG ACTAATTGAG ATGCATGCTT TGCATACTTC TGCCTGCTGG GGAGCCTGGG 240
 GACTTTCCAC ACCTGGTTGC TGA CTAATTG AGATGCATGC TTTGCATACT TCTGCCTGCT 300
 GGGGAGCCTG GGGACTTTCC ACACCCTAAC TGACACACAT TCCACAGAAAT TAATTCCCCT | 360
 347 8 | LINKER #2=13bp |
 AGTTATTAAT AGTAATCAAT TACGGGGTCA TTAGTTTATA GCCCATATAT GGAGTTCCGC 420
 GTTACATAAC TTACGGTAAA TGGCCCGCCT GGCTGACCGC CCAACGACCC CCGCCCATTG 480
 ACGTCAATAA TGACGTATGT TCCCATAGTA ACGCCAATAG GGACTTTCCA TTGACGTCAA 540
 CVM PROMOTOR-AMPLIFICATOR DE GENE = 567bp
 TGGGTGGACT ATTTACGGTA AACTGCCAC TTGGCAGTAC ATCAAGTGTA TCATATGCCA 600
 AGTACGCCCC CTATTGACGT CAATGACGGT AAATGGCCCG CCTGGCATT A TGCCCAGTAC 660
 ATGACCTTAT GGGACTTTCC TACTTGGCAG TACATCTACG TATTAGTCAT CGCTATTACC 720
 ATGGTGATGC GGTTTTGGCA GTACATCAAT GGGCGTGGAT AGCGGTTTGA CTCACGGGGA 780
 TTTCCAAGTC TCCACCCCAT TGACGTCAAT GGGAGTTTGT TTTGGCACCA AAATCAACGG 840
 GACTTTCCAA AATGTCGTAA CAACTCCGCC CCATTGACGC AAATGGGCGG TAGGCGTGTA 900
 CGGTGGGAGG TCTATATAAG CAGAGCTGGG TACGTGAACC GTCAGATCGC CTGGAGACGC 960
 927 8 | LINKER #3=7bp | 934 5 |
 Bgl 2 | STARTUL CATENEI UȘOARE CONDUCTOR NATURAL = 66bp
 CATCACAGAT CTCTCACTAT GGATTTTCAG GTGCAGATTA TCAGCTTCCT GCTAATCAGT 1020
 978 9 |
 GCTTCAGTCA TAATGTCCAG AGGACAAATT GTTCTCTCCC AGTCTCCAGC AATCCTGTCT 1080
 1044 5 +1 |
 GCATCTCCAG GGGAGAAGGT CACAATGACT TGCAGGGCCA GCTGAAGTGT AAGTTACATC 1140
 CACTGGTTCC AGCAGAAGCC AGGATCCTCC CCCAAACCCT GGATTTATGC CACATCCAAC 1200
 REGIUNEA VARIABILĂ A CATENEI UȘOARE 318bp 106 AMINOACID
 CTGGCTTCTG GAGTCCCTGT TCGCTTCAGT GGCAGTGGGT CTGGGACTTC TTA CTCTCTC 1260
 ACCATCAGCA GAGTGGAGGC TGAAGATGCT GCCACTTATT ACTGCCAGCA GTGGACTAGT 1320
 AACCCACCCA CGTTCGGAGG GGGGACCAAG CTGGAAATCA AACGTACGGT GGCTGCACCA 1380
 1362 3 | BsiWI |
 TCTGTCTTCA TCTTCCCGCC ATCTGATGAG CAGTTGAAAT CTGGAACATG CTCTGTTGTG 1440
 TGCTGCTGA ATA ACTTCTA TCCCAGAGAG GCCAAAGTAC AGTGAAGGT GGATAACGCC 1500

Fig. 8

CONSTANTA UMANĂ KAPA=324bp=107 AMINOACID și STOP CODON

CTCCAATCGG GTAACCTCCA GGAGAGTGTĈ ACAGAGCAGG ACAGCAAGGA CAGCACCTAC 1560

AGCCTCAGCA GCACCCTGAC GCTGAGCAA GCAGACTACG AGAAACAAA AGTCTACGCC 1620

TGCGAAGTCA CCCATCAGGG CCTGAGCTCG CCCGTAC'AA AGAGCTTCAA CAGGGGAGAG 1680

STOPAREA
CATENEI
UȘOARE **Eco RI** **LINKER #4=81bp**

TGTTCGAATTC AGATCCGTTA ACGGTTACCA ACTACCTAGA CTGGATTCTG GACAACATGC 1740
1646 17

GGCCGTGATA TCTACGTATG ATCAGCCTCG ACTGTGCCTT CTAGTTGCCA GCCATCTGTT 1800
1771 12

GTTTGCCCT CCCCCGTGCC TTCCTTGACC CTGGAAGGTG CCACTCCCAC TGTCCTTTCC 1860

TAATAAAATG AGGAAATTGC ATCGCATTGT CTGAGTAGGT GTCATTCTAT TCTGGGGGGT 1920

HORMON DE CREȘTERE BOVIN, REGIUNEA POLIADENILAȚIEI =231bp

GGGGTGGGGC AGGACAGCAA GGGGGAGGAT TGGGAAGACA ATAGCAGGCA TGCTGGGGAT 1980

LINKER #5=15bp

CGGGTGGGCT CTATGGAACC AGCTGGGGCT CGACAGCTAT GCCAAGTACG CCCCCTATTG 2040
2002 3 2017 8

ACGTCAATGA CGGTAAATGG CCCGCCTGGC ATTATGCCCA GTACATGACC TTATGGGACT 2100

TTCTACTTGG GCAGTACATC TACGTATTAG TCATCGCTAT TACCATGGTG ATGCGGTTTT 2160

CMV PROMOTOR-AMPLIFICATOR DE GENE =334bp

GGCAGTACAT CAATGGGCGT GGATAGCGGT TTGACTCACG GGGATTTCCA AGTCTCCACC 2220

CCATTGACGT CAATGGGAGT TTGTTTTGGC ACCAAAATCA ACGGGACTTT CAAAATGTC 2280

GTAACAACCTC CGCCCCATTG ACGCAAATGG GCGGTAGGCG TGTACGGTGG GAGGTCTATA 2340

LINKER #6=7bp **Sal I**

TAAGCAGAGC TGGGTACGTC CTCACATTCA GTGATCAGCA CTGAACACAG ACCCGTCCAG 2400
2351 2 2358 9

STARTUL
CATENEI GRELE CONDUCTOR SINTETIC ȘI NATURAL **Mlu I** 2457 8

ATGGG | GGGA GCCTCATCTT GCTCTTCTT GTCGCTGTTG CTACGGGTGT CCTGTCCAG 2460
2401 -5 -4 -3 -2 -1 +1

GTACAACCTGC AGCAGCCTGG GGCTGAGCTG GTGAAGCCTG GGGCCTCAGT GAAGATGTCC 2520

TGCAAGGCTT CTGGCTACAC ATTTACCAGT TACAATATGC ACTGGGTAAA ACAGACACCT 2580

VARIABILA CATENEI GRELE =363bp=121 AMINOACID

GGTCGGGGCC TGGAAATGGAT TGGAGCTATT TATCCCGGAA ATGGTGATAC TTCCTACAAT 2640

CAGAAGTTCA AAGGCAAGGC CACATTGACT GCAGACAAAT CCTCCAGCAC AGCCTACATG 2700

CAGCTCAGCA GCCTGACATC TGAGGACTCT GCGGTCTATT ACTGTGCAAG ATCGACTTAC 2760

TACGGCGGTG ACTGGTACTT CAATGTCTGG GCGCGAGGGA CCACGGTCAC CGTCTCTGCA 2820

Nhe I

GCTAGCACCA AGGGCCCATC GGTCTTCCCC CTGGCACCTT CCTCCAAGAG CACCTCTGGG 2880

GGCACAGCGG CCCTGGGCTG CCTGGTCAAG GACTACTTCC CCGAACCGGT GACGGTGTCG 2940

CONSTANTA UMANĂ GAMA I =993bp

TGGAACTCAG GCGCCCTGAC CAGCGGCGTG CACACCTTCC CGGCTGTCTT ACAGTCCTCA 3000

Fig. 9

330 AMINOACID ȘI STOP CODON

GGACTCTACT CCCTCAGCAG CGTGGTGACC GTGCCCTCCA GCAGCTTGGG CACCCAGACC 3060

TACATCTGCA ACGTGAATCA CAAGCCCAGC AACACCAAGG TGGACAAAGAA AGCAGAGCCC 3120

AAATCTTGTG ACAAAACTCA CACATGCCCA CCGTGCCAG CACCTGAACT CCTGGGGGGA 3180

CCGTCACTCT TCCTCTTCCC CCCAAAACCC AAGGACACCC TCATGATCTC CCGGACCCCT 3240

GAGGTACAT GCGTGGTGGT GGACGTGAGC CACGAAGACC CTGAGGTCAA GTTCAACTGG 3300

TACGTGGACG GCGTGGAGGT GCATAATGCC AAGACAAAGC CGCGGGAGGA GCAGTACAAC 3360

AGCACGTACC GTGTGGTCAG CGTCCTCACC GTCCTGCACC AGGACTGGCT GAATGGCAAG 3420

GAGTACAAGT GCAAGGTCTC CAACAAAGCC CTCCCAGCCC CCATCGAGAA AACCACTCTCC 3480

AAAGCCAAAG GGCAGCCCCG AGAACCACAG GTGTACACCC TGCCCCATC CCGGGATGAG 3540

CTGACCAAGA ACCAGGTCAG CCTGACCTGC CTGGTCAAAG GCTTCTATCC CAGCGACATC 3600

GCCGTGGAGT GGGAGAGCAA TGGGCAGCCG GAGAACAACACT ACAAGACCAC GCCTCCCGTG 3660

CTGGACTCCG ACGGCTCCTT CTTCTCTAC AGCAAGCTCA CCGTGGACAA GAGCAGGTGG 3720

CAGCAGGGGA ACGTCTTCTC ATGCTCCGTG ATGCATGAGG CTCTGCACAA CCACTACACG 3780

STOPAREA CATENEI GRELE **Bam HI** LINKER #7=81bp

CAGAAGAGCC TCTCCCTGTC TCCGGGTAAA **TGAGGATCCG** TTAACGGTTA CCAACTACCT 3840
3813¹⁴

AGACTGGATT CGTGACAACA TGCGGCCGTG ATATCTACGT ATGATCAGCC **TCGACTGTGC** 3900
3894¹⁵

CTTCTAGTTG CCAGCCATCT GTTGTTTGCC CCTCCCCGT GCCTTCCTTG ACCCTGGAAG 3960

GTGCCACTCC CACTGTCCCT TCCTAATAAA ATGAGGAAAT TGATCGCAT TGTCTGAGTA 4020

HORMON DE CREȘTERE BOVIN REGIUNEA POLIADENILAȚIEI =231bp

GGTGTCAATC TATTCTGGGG GGTGGGGTGG GGCAGGACAG CAAGGGGGAG GATTGGGAAG 4080

LINKER #8=34bp

ACAATAGCAG GCATGCTGGG GATGCGGTGG GCTCTATGGA **ACCAGCTGGG** GCTCGACAGC 4140
4125¹⁶

GCTGGATCTC CCGATCCCCA GCTTTGCTTC TCAATTTCTT ATTTGCATAA TGAGAAAAAA 4200

AGGAAAATTA ATTTTAACAC CAATTCAGTA GTTGATTGAG CAAATGCGTT GCCAAAAAGG 4260

PROMOTOR MAJOR AL HEMOGLOBINEI BETA DE ȘOARECE =366bp

ATGCTTTAGA GACAGTGGTC TCTGCACAGA TAAGGACAAA CATTATTCAG AGGGAGTACC 4320

CAGAGCTGAG ACTCCTAAGC CAGTGAGTGG CACAGCATTC TAGGGAGAAA TATGCTTGTC 4380

ATCACCGAAG CCTGATTCCG TAGAGCCACA CCTTGGAAG GGCCAATCTG CTCACACAGG 4440

ATAGAGAGGG CAGGAGCCAG GGCAGAGCAT ATAAGGTGAG GTAGGATCAG TTGCTCCTCA 4500

Fig. 10

CATTGCTTC TGACATAGTT LINKER #9=19bp 5' INTRANSLANT DHFR=82bp
 GTGTTGGGAG CTTGGATAGC TTGGACAGCT CAGGGCTGCC 4560
 4525 6 4544 5
 ATTTGCGGCC AAATTGACG GCAATCCTAG CGTGAAGGC GGTAGGATTT TATCCCCGCT 4620
START DHFR
 GCCATCATGG TTGACCATT GAACTGCATC GTCGCCGTGT CCCAAAATAT GGGGATTGGC 4680
 4626 7
 AAGAACGGAG ACCTACCCTG GCCTCCGCTC AGGAACGAGT TCAAGTACTT CCAAAGAATG 4740
 ACCACAACCT CTTCAGTGGA AGGTAAACAG AATCTGGTGA TTATGGGTAG GAAAACCTGG 4800
DHFR=564bp=187 AMINOACID SI STOP CODON
 TTCTCCATTC CTGAGAAGAA TCGACCTTTA AAGGACAGAA TTAATATAGT TCTCAGTAGA 4860
 GAACTCAAAG AACCACCAGC AGGAGCTCAT TTTCTTGCCA AAAGTTTGGG TGATGCCTTA 4920
 AGACTTATTG AACAACCGGA ATTGGCAAGT AAAGTAGACA TGGTTTGGAT AGTCGGAGGC 4980
 AGTTCTGTTT ACCAGGAAGC CATGAATCAA CCAGGCCACC TTAGACTCTT TGTGACAAGG 5040
 ATCATGCAGG AATTTGAAAG TGACACGTTT TTCCAGAAA TTGATTTGGG GAAATATAAA 5100
 CTTCTCCCAG AATACCCAGG CGTCCTCTCT GAGGTCCAGG AGGAAAAAGG CATCAAGTAT 5160
STOP DHFR 3' INTRANSLANT DHFR=82bp
 AAGTTTGAAG TCTACGAGAA GAAAGACTAA CAGGAAGATG CTTTCAAGTT CTCTGCTCCC 5220
 5140 1 5272 3
 CTCCTAAAGC TATGCATTTT TATAAGACCA TGGGACTTTT GCTGGCTTTA LINKER #10
 =10bp GATCAGCCTC 5280
 GACTGTGCCT TCTAGTTGCC AGCCATCTGT TGTTTGCCCC TCCCCCGTGC CTTCCTTGAC 5340
HORMON DE CREȘTERE BOVIN REGIUNEA POLIADENILATIEI =231bp
 CCTGGAAGGT GCCACTCCCA CTGTCTTTTC CTAATAAAAT GAGGAAATTG CATCGCATTG 5400
 TCTGAGTAGG TGTCATTCTA TTCTGGGGGG TGGGGTGGGG CAGGACAGCA AGGGGGAGGA 5460
LINKER #11
 TTGGGAAGAC AATAGCAGGC ATGCTGGGGA TCGGGTGGGC TCTATGGAAC CAGCTGGGGC 5520
 =17bp 5513 4
 TCGAGCTACT AGCTTTGCTT CTCAATTTCT TATTTGCATA ATGAGAAAAA AAGGAAAATT 5580
 5530 1
 AATTTTAACA CCAATTCAGT AGTTGATTGA GCAAATGCGT TGCCAAAAAG GATGCTTTAG 5640
PROMOTOR MAJOR AL HEMOGLOBINEI BETA DE ȘOARECE =366bp
 AGACAGTGTT CTCTGCACAG ATAAGGACAA CTAGGGAGAA ATATGCTTGT CATCACCGAA 5700
 GACTCCTAAG CCAGTGAGTG GCACAGCATT CTAGGGAGAA ATATGCTTGT CATCACCGAA 5760
 GCCTGATTCC GTAGAGCCAC ACCTTGGTAA GGGCCAATCT GCTCACACAG GATAGAGAGC 5820
 GCAGGAGCCA GGGCAGAGCA TATAAGGTGA GGTAGGATCA GTTGCTCCTC ACATTTGCTT 5880
LINKER #12=21bp START NEO
 CTGACATAGT TGTGTTGGGA GCTTGGATCG ATCCTCTATG GTTGAACAAG ATGGATTGCA 5940
 5896 7 5917 8
 CGCAGGTTCT CCGGCCGCTT GGGTGGAGAG GCTATTCGGC TATGACTGGG CACAACAGAC 6000

Fig. 11

AATCGGCTGC TCTGATGCCG CCGTGTTCGG GCTGTCAGCG CAGGGGGCGCC CGGTTCTTTT 6060
 TRANSFERARE FOSFORICĂ NEOMICIN =795bp=264 AMINOACID ȘI STOP CODON
 TGTC AAGACC GACCTGTCCG GTGCCCTGAA TGAAGTGCAG GACGAGGCAG CGCGCCTATC 6120
 GTGGCTGGCC ACGACGGGCG TTCCTTGGCG AGCTGTGCTC GACGTTGTCA CTGAAGCGCG 6180
 AAGGGACTGG CTGCTATTGG GCGAAGTGCC GGGGCAGGAT CTCCTGTCAT CTCACCTTGC 6240
 TCCTGCCGAG AAAGTATCCA TCATGGCTGA TGCAATGCGG CGGCTGCATA CGCTTGATCC 6300
 GGCTACCTGC CCATTGACC ACCAAGCGAA ACATCGCATC GAGCGAGCAC G TACTCGGAT 6360
 GGAAGCCGGT CTTGTGCATC AGGATGATCT GGACGAAGAG CATCAGGGGC TCGCGCCAGC 6420
 CGAACTGTTT GCCAGGCTCA AGGCGCGCAT GCCCGACGGC GAGGATCTCG TCGTGACCCA 6480
 TGGCGATGCC TGCTTGCCGA ATATCATGGT GGAAAATGGC CGCTTTTCTG GATTCATCGA 6540
 CTGTGGCCGG CTGGGTGTGG CGGACCGCTA TCAGGACATA GCGTTGGCTA CCCGTGATAT 6600
 TGCTGAAGAG CTTGGCGGCG AATGGGCTGA CCGCTTCCTC GTGCTTTACG GTATCGCCGC 6660
 TCCCGATTCC CAGCGCATCG CCTTCTATCG CCTTCTTGAC GAGTTCTTCT ^{STOPARE NEOI} GAGCGGGACT 6720
 6712 3
 CTGGGGTTCC AAATGACCGA CCAAGCGACG CCCAACCTGC CATCACGAGA TTTCGATTCC 6780
 3' INTRANSLANT NEO=173bp
 ACCGCCGCCT TCTATGAAAG GTTGGGCTTC GGAATCGTTT TCCGGGACGC CGGCTGGATG 6840
 ATCCTCCAGC GCGGGGATCT CATGCTGGAG TTCTTCGCCC ACCCGAACTT GTTTATTGCA 6900
 6885 6
 GCTTATAATG GTTACAAATA AAGCAATAGC ATCACAAATT TCACAAATAA AGCATTTTTT 6360
 REGIUNEA DE POLIADENILATIE PRECOCE SV40 = 133bp
 TCACTGCATT CTAGTTGTGG TTTGTCCAAA CTCATCAATC TATCTTATCA TGTCTGGATC 7020
 7018 9
 LINKER #13=19bp
 GCGGCCGCGA TCCCGTCCGAG AGCTTGGCGT AATCATGGTC ATAGCTGTTT CCTGTGTGAA 7080
 7037 8
 PUC 19
 ATTGTTATCC GCTCACAATT CCACACAACA TACGAGCCGG AAGCATAAAG TGTAAGCCT 7140
 GGGGTGCCTA ATGAGTGAGC TAACTCATAT TAATTGCGTT GCGCTCACTG CCCGCTTTCC 7200
 AGTCGGGAAA CCTGTGCTGC CAGCTGCATT AATGAATCGG CCAACGCGCG GGGAGAGGCG 7260
 GTTTGCCTAT TGGGCGCTCT TCCGCTTCCT CGCTCACTGA CTCGCTGCGC TCGGTGCTTC 7320
 GGCTGCGGCG AGCGGTATCA GCTCACTCAA AGGCGGTAAT ACGGTTATCC ACAGAATCAG 7380
 GGGATAACGC AGGAAAGAAC ATGTGAGCAA AAGGCCAGCA AAAGGCCAGG AACCGTAAAA 7440
 7461 = ORIGINE BACTERIANĂ A REPRODUCERII
 AGGCCGCGTT GCTGGCGTTT TCCATAGGC TCCGCCCCCC TGACGAGCAT CACAAAAATC 7500

Fig. 12

GACGCTCAAG TCAGAGGTGG CGAAACCCGA CAGGACTATA AAGATACCAG GCGTTTCCCC 7560
 CTGGAAGCTC CCTCGTGCGC TCTCCTGTTC CGACCCTGCC GCTTACCGGA TACCTGTCCG 7620
 CCTTTCTCCC TTCGGGAAGC GTGGCGCTTT CTCAATGCTC ACGCTGTAGG TATCTCAGTT 7580
 CGGTGTAGGT CGTTCGCTCC AAGCTGGGCT GTGTGCACGA ACCCCCCGTT CAGCCCGACC 7740
 GCTGCGCCTT ATCCGGTAAC TATCGTCTTG AGTCCAACCC GGTAAGACAC GACTTATCGC 7800
 CACTGGCAGC AGCCACTGGT AACAGGATTA GCAGAGCGAG GTATGTAGGC GGTGCTACAG 7860
 AGTTCTTGAA GTGGTGGCCT AACTACGGCT AACTAGAAAG GACAGTATTT GGTATCTCCG 7920
 CTCTGCTGAA GCCAGTTACC TTCGGAAAAA GAGTTGGTAG CTCTTGATCC GGCAACAAA 7980
 CCACCGCTGG TAGCGGTGGT TTTTTGTTT GCAAGCAGCA GATTACGCGC AGAAAAAAG 8040
 GATCTCAAGA AGATCCTTTG ATCTTTTCTA CGGGGTCTGA CGCTCAGTGG AACGAAACT 8100
 CACGTTAAGG GATTTTGGTC ATGAGATTAT CAAAAAGGAT CTTACCTAG ATCCTTTTAA 8160
 ATTAAAAATG AAGTTTTAAA TCAATCTAAA GTATATATGA GTAAACTTGG TCTGACAGTT 8220
 LACTAMAZĂ BETA]
 ACCAATGCTT AATCAGTGAG GCACCTATCT CAGCGATCTG TCTATTTCTG TCATCCATAG 8280
 TTGCCTGACT CCCCCTCGTG TAGATAACTA CGATACGGGA GGGCTTACCA TCTGGCCCCA 8340
 GTGCTGCAAT GATACCGCGA GACCCACGCT CACCGGCTCC AGATTTATCA GCAATAAACC 8400
 LACTAMAZĂ BETA =861bp=286 AMINOACID SI STOP CODON
 AGCCAGCCGG AAGGGCCGAG CGCAGAAGTG GTCCTGCAAC TTTATCCGCC TCCATCCAGT 8460
 CTATTAATTG TTGCCGGGAA GCTAGAGTAA GTAGTTCGCC AGTTAATAGT TTGCCCAACG 8520
 TTGTTGCCAT TGCTACAGGC ATCGTGGTGT CACGCTCGTC GTTTGGTATG GCTTCATTCA 8580
 GCTCCGGTTC CCAACGATCA AGGCGAGTTA CATGATCCCC CATGTTGTGC AAAAAAGCGG 8640
 TTAGCTCCTT CGGTCCTCCG ATCGTTGTCA GAAGTAAGTT GGCCGAGTG TTATCACTCA 8700
 TGGTTATGGC AGCACTGCAT AATTCTCTTA CTGTATGCC ATCCGTAAGA TGCTTTTCTG 8760
 TGA CTGGTGA G TACTCAACC AAGTCATTCT GAGAATAGTG TATGCGGCGA CCGAGTTGCT 8820
 CTGCCCCGGC GTCAATACGG GATAATACCG CGCCACATAG CAGA ACTTTA AAAGTGCTCA 8880
 TCATTGGAAA ACGTTCTTCG GGGCGAAAAC TCTCAAGGAT CTTACCGCTG TTGAGATCCA 8940
 GGTGATGTA ACCCACTCGT GCACCCA ACT GATCTTCAGC ATCTTTTACT TTCACCAGCG 9000
 TTTCTGGGTG AGCAAAAACA GGAAGGCAAA ATGCCGCAAA AAAGGGAATA AGGGCGACAC 9060
 GGAAATGTTG AATACTCATA] STARTUL LACTAMAZEI BETA
 CTCTTCCTTT TTCAATATTA TTGAAGCATT TATCAGGGTT 9120
 ATTGTCTCAT GAGCGGATAC ATATTTGAAT GTATTTAGAA AAATAACAA ATAGGGGTTT 9180
 CGCGCACATT TCCCCGAAAA GTGCCACCT

Fig. 13

CONDUCTOR

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-19          -15          -10          -5
FRAME 1 Met Gly Trp Ser Leu Ile Leu Leu Phe Leu Val Ala Val Ala Thr Arg Val
      ATG GGT TGG AGC CTC ATC TTG CTC TTC CTT GTC GCT GTT GCT ACG CGT GTC
          2409          2418          2427          2436          2445

-1  +1      FR1          10          15
Leu Ser| Gln Val Gln Leu Gln Gln Pro Gly Ala Glu Leu Val Lys Ala Gly Ala Ser
CTG TCC| CAG GTA CAA CTG CAG CAG CCT GGG GCT GAG CTG GTG AAG CCT GGG GCC TCA
      2460          2469          2478          2487          2496          2505

      20          25          30 31 CDR1 35 36
Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Asn Met His Trp
GTG AAG ATG TCC TGC AAG GCT TCT GGC TAC ACA TTT ACC AGT TAC AAT ATG CAC TGG
      2517          2526          2536          2544          2553          2562

      40 FR2          45          49 50 52 52A 53 54
Val Lys Gln Thr Pro Gly Arg Gly Leu Glu Trp Ile Gly Ala Ile Tyr Pro Gly Asn
GTA AAA CAG ACA CCT GGT CGG GGC CTG GAA TGG ATT GGA GCT ATT TAT CCC GGA AAT
      2574          2583          2592          2601          2610          2619

55          CDR2 60          65 66 FR3 70
Gly Asp Thr Ser Tyr Asn Gln Lys Phe Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys
GGT GAT ACT TCC TAC AAT CAG AAG TTC AAA GGC AAG GCC ACA TTG ACT GCA GAC AAA
      2631          2640          2649          2658          2667          2676

      75          80 82 82A 82B 82C 83 85
Ser Ser Ser Thr Ala Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val
TCC TCC AGC ACA GCC TAC ATG CAG CTC AGC AGC CTG ACA TCT GAG GAC TCT GCG GTC
      2688          2697          2706          2715          2724          2733

90          94 95 CDR3 100 100A 100B 100C 100D 101 102 103
Tyr Tyr Cys Ala Arg Ser Thr Tyr Tyr Gly Gly Asp Trp Tyr Phe Asn Val Trp Gly
TAT TAC TGT GCA AGA TCG ACT TAC TAC GGC GGT GAC TGG TAC TTC AAT GTC TGG GGC
      2745          2754          2763          2772          2781          2790

105 FR4          110          113
Ala Gly Thr Thr Val Thr Val Ser Ala
GCA GGG ACC ACG GTC ACC GTC TCT GCA
      2802          2811          2820
    
```

Fig. 15

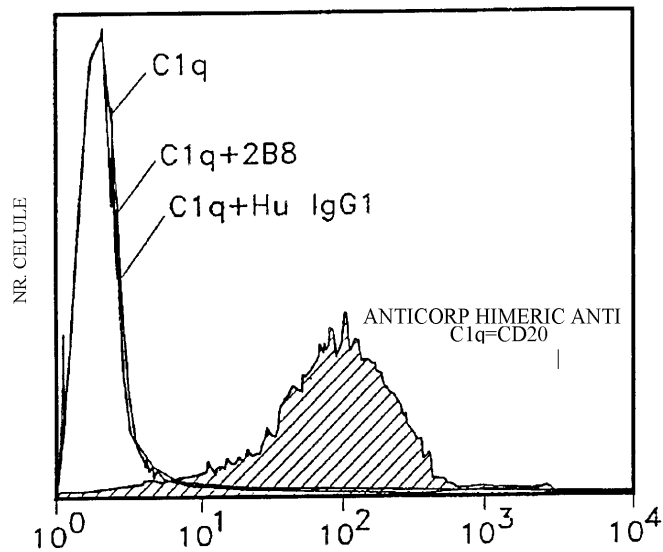


Fig. 16

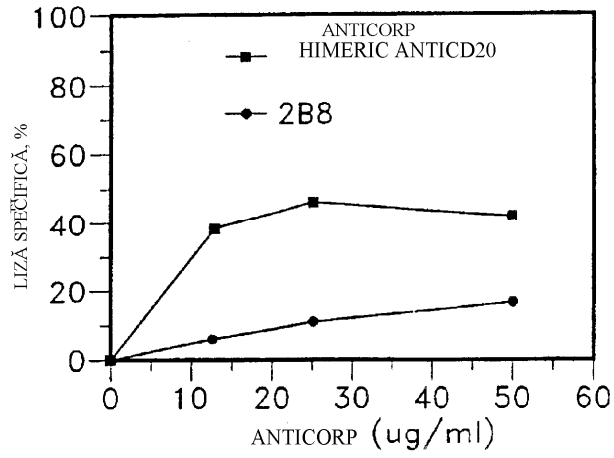


Fig. 17

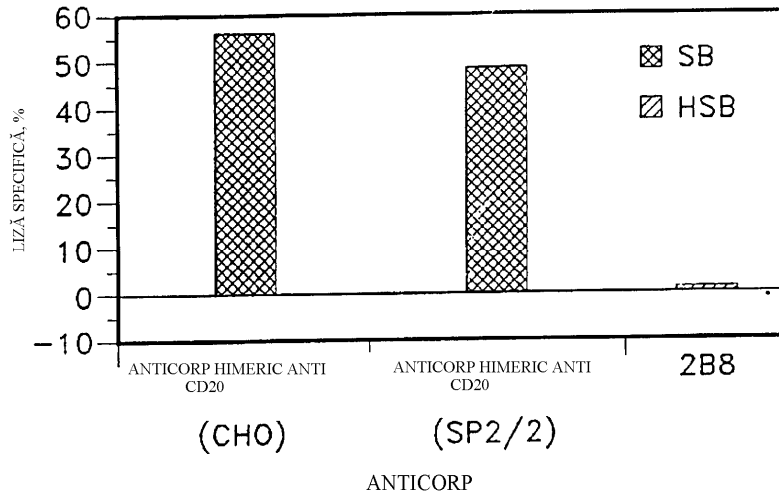


Fig. 18

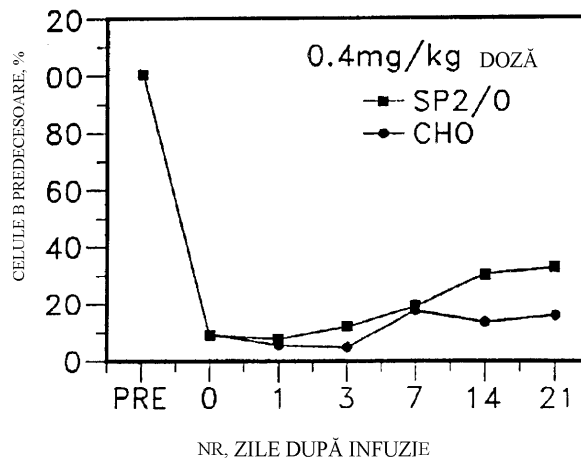


Fig. 19

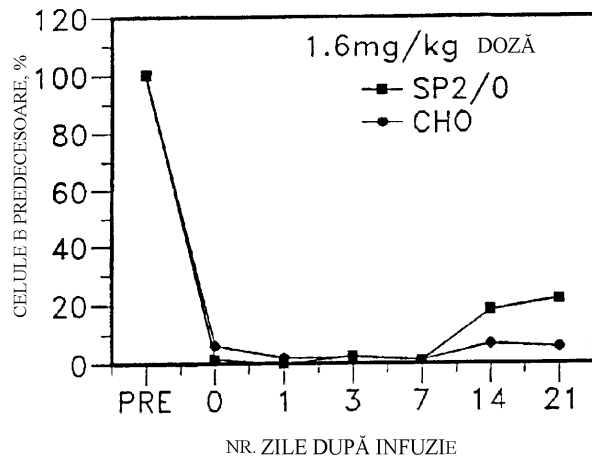


Fig. 20

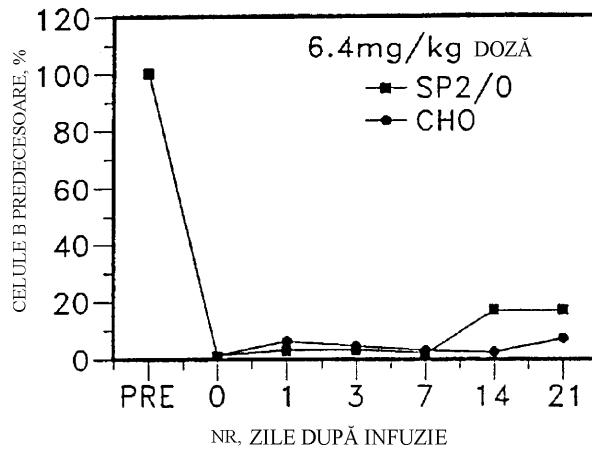


Fig. 21

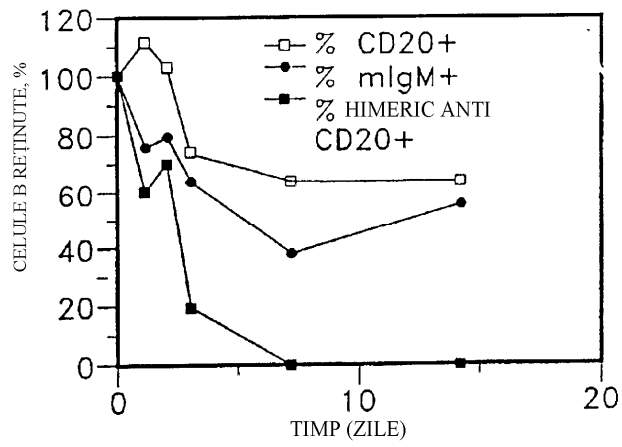


Fig. 22

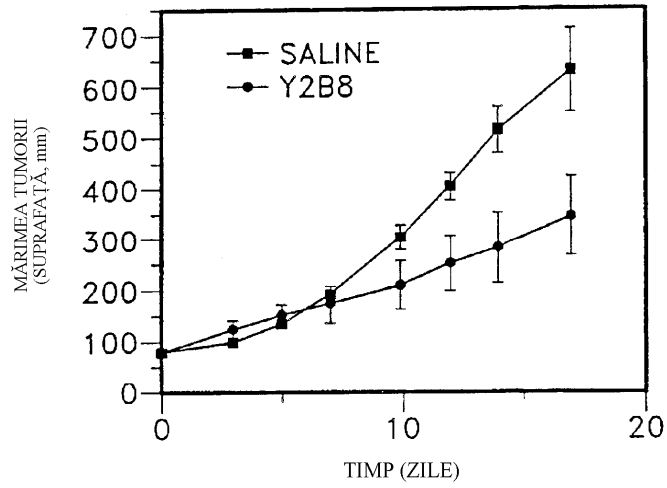


Fig. 23

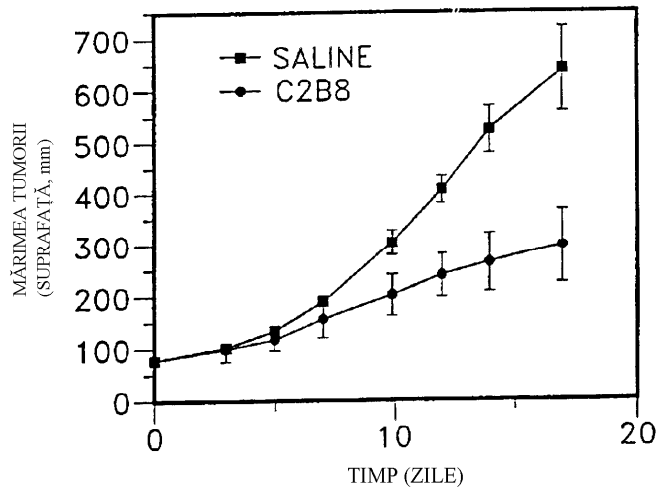


Fig. 24

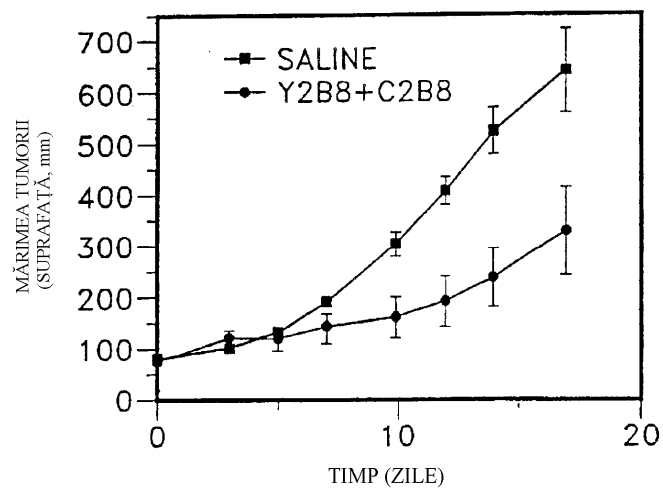


Fig. 25

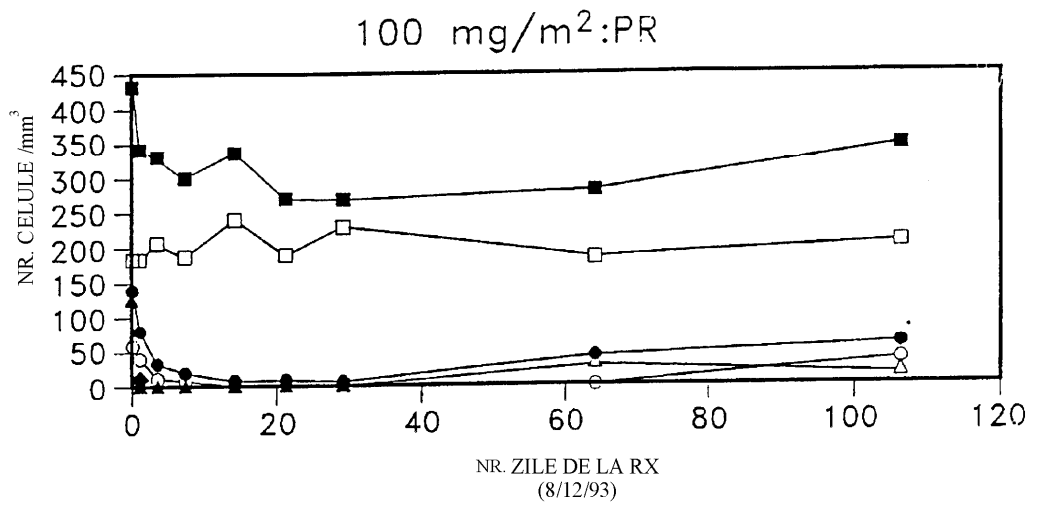


Fig. 26

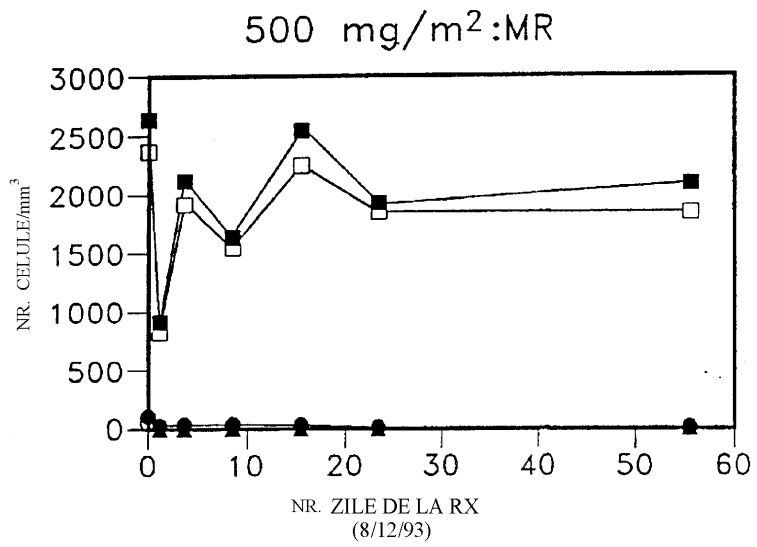


Fig. 27