

Specifications:

Gene:	hSLC7A5
Accession:	NP_003477
Insert size:	1537bp
Concentration:	10µg at 0.2µg/µL

hSLC7A5/LAT1 cDNA Plasmid

SLC7A5 solute carrier family 7 (amino acid transporter light chain, L system), member 5 [*Homo sapiens* (human)]

Also known as: E16; CD98; LAT1; 4F2LC; MPE16; hLAT1; D16S469E

Summary:

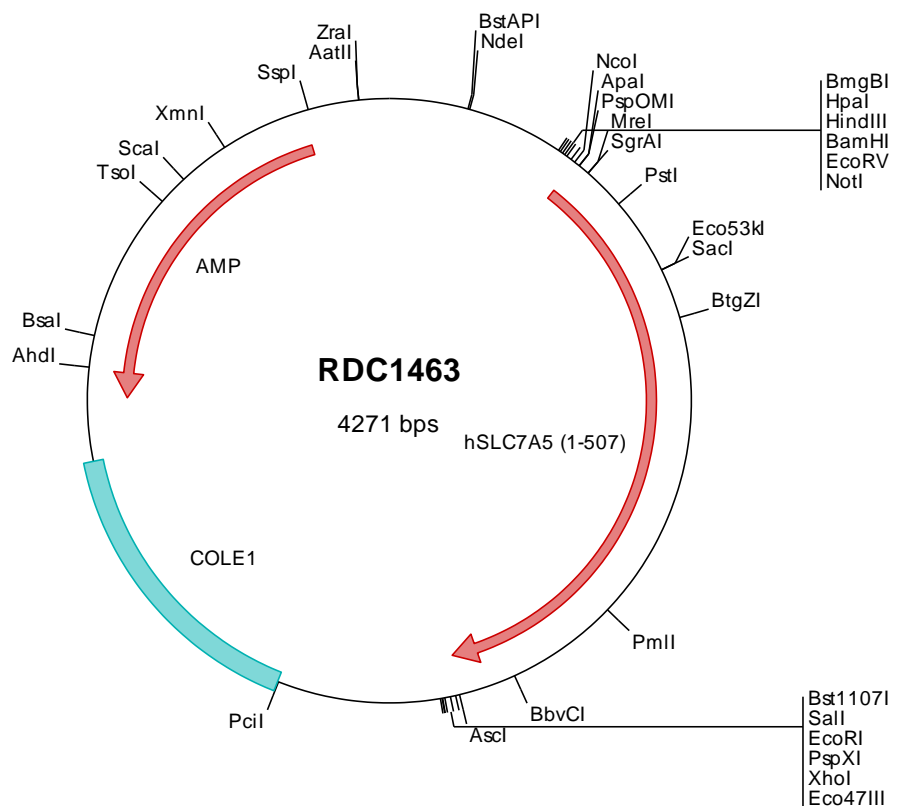
SLC7A5 belongs to the amino acid-polyamine-organocation (APC) superfamily. SLC7A5 is a sodium-independent, high-affinity transporter of large neutral amino acids such as phenylalanine, tyrosine, leucine, arginine and tryptophan, when associated with SLC3A2/4F2hc. SLC7A5 plays a role in neuronal cell proliferation (neurogenesis) in brain. It may also play an important role in high-grade gliomas.

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

> RDC1463 Plasmid DNA Sequence

```

1   tcgctgctgtt  cggatgatgac  ggtgaaaacc  tctgacacat  gcagctcccc  gagacgggtca  cagcttgtct  gtaagcggat  gccgggagca  gacaagcccc
101  tcaggggcgcg  tcacgcggtg  ttggcgggtg  tcggggctgg  ctttaactatg  cggcatcaga  gcagattgta  ctgagagtgc  accatategc  gttgaaata
201  ccgcacagat  gcgtaaggag  aaaataccgc  atcaggcgcc  attcgcatt  caggctcgc  aactgttggg  aagggcgatc  ggtgcgggcc  tcttcgctat
301  tacgcccagct  ggcgaaaagg  ggatgtgctg  caagycgatt  aagttgggta  acgcccagggt  ttcccagtc  acgacgttgt  aaaacgacgg  ccagtgaatt
401  ggagacgtgt  taacaagctt  ggatccgata  tcgctagcgc  ggccgccaacc  atggcgggtg  cgggcccga  gccggcgcg  ctagcggcgc  cggcggccga
501  ggagaaggaa  gaggcgcggg  agaagatgct  ggccgccaag  agcgcggagc  gctcggcgcc  gccaggcgag  gccgaggcgg  tgaccctgca  gccgaaacatc
601  acgctgctca  acggcgtggc  catcatctgt  gggaccatta  toggctcggg  catctctctg  acgcccacgg  gcgtgctcaa  ggaggcagge  tcgcccgggc
701  tggcgtcgtt  ggtgtggccc  gcgtgcccgc  tcttctccat  cgtgggcccg  cctctctacc  cggagctcgg  caccaccatc  tccaaatcgg  gccggcacta
801  cgcctacatg  ctggaggtct  acggctcgtc  gccgccttcc  ctcaagctct  ggatcgagct  gctcatcatc  cggccttcat  cgcagtacat  cgtggccctg
901  gtcttggcca  cctacctgct  caagccgctc  ttcccacct  gcccggtgcc  cgaggaggca  gccaaagctc  tggcctgct  ctgctgctg  ctgctcagcg
1001  ccgtgaaactg  ctacagcgtg  aaggcgcgca  ccgggtcca  ggtatgcctt  gccgcgcca  agctcctggc  cctggcctg  atcatcctg  tgggctctgt
1101  ccagatcggg  aagggtgatg  tgtccaatct  agatcccaac  ttctcatttg  aaggcaccaa  actggatgtg  gggaacattg  tcttggcatt  atacagcggc
1201  ctctttgcct  atggaggatg  gaattacttg  aatttctgca  cagaggaat  gatcaaccac  tacagaaacc  tgcccctggc  catcatcatc  tccctgcca
1301  tcgtgacgtg  ggtgtacgtg  ctgaccaac  tggcctactt  caccaccctg  tcaccagcgc  agatgctgtc  gtcggagcgc  gtcggcgtg  acttgggaa
1401  ctatacactg  ggcgtcatgt  cctggatcat  ccccgcttcc  gtggcctgt  cctgctctgg  ctccgtcaat  gggctccctg  tcacatctc  caggctctc
1501  ttctgtgggt  ccggggaagg  ccaactgccc  tccatctct  caatgatcca  cccacagctc  ctcccccgc  tgccgtccct  cgtgttcaag  tgtgtgatga
1601  cgtctctca  cgccttctcc  aagtcacatc  tctcctctcc  caacttctcc  agcttctcca  actggctctg  cctggcctg  cgtggcctg  gcaatcctg
1701  gctgcgcaac  agaaggctg  agcttgagcg  gcccatcaag  gtgaacctgg  cctctcctgt  ccttctctcc  ctggcctgcc  tcttctctcc  agccctctc
1801  ttctgaaac  ccccgctgga  gcttggtcgc  ggttcccaag  taactctcag  caggctgccc  gtctacttct  togggctgt  tgggaaaac  gccccaagt
1901  ggtctctcca  ggcactcttc  tccacagcgc  tccctgttca  ggaactcag  caggctgtcc  cccaggagac  ataaaggcgc  gccagtatac  tctagatctg
2001  acaccgggg  aattcctcga  gcgctcgtct  ctactgttgc  gtaactatgg  tcatagctgt  ttctgtgtg  aaattgttat  ccgctcaca  ttccacaca
2101  catacagcc  ggaagcataa  agtgaaggc  ctgggtgccc  taatgatgta  gctaacacc  ataatgtgc  ttgcgtcac  tgcgcgctt  ccagtcggga
2201  aacctgtcgt  gccagctgca  ttaatgaatc  ggccaacgcg  cggggagagg  cgttttgcgt  attggcgcg  cttccgctc  ctccgctact  gactcgtcg
2301  gctcggctgt  tcggctcggg  cgagcgggat  cagctcactc  aaaggcggta  ataccggtat  cacagaatc  aggggataac  gcaggaaga  acatgtgagc
2401  aaaaggcag  caaaaggcca  ggaaccgtaa  aaagcccgcc  ttgtgctgct  ttttccatag  gctccgccc  cctgacgagc  cctgacgctg  tccgacctg
2501  agtcagaggt  ggcgaaaacc  gacagacta  taaagatacc  aggcgtttcc  ccttggaaag  tccctcgtg  gctctcctg  tccgacctg  ccgcttaccg
2601  gatacctgtc  cgccttctcc  ccttccggaa  gcgtggcgtc  ttctcaatgc  tcacgctgta  ggtatctcag  ttcggtgtg  gtcgttctg  ccaagctggg
2701  ctgtgtgca  gaaacccccc  ttcagccgca  ccgctgccc  ttatccgta  actatcgtct  tgagtccaac  ccgtaagac  cgcactatc  gcaactggca
2801  gcagccactg  gtaacaggat  tagcagagcg  aggtatgtg  gcggtgttac  agagtctctg  aagtgtgtg  ctaactacg  ctacactaga  aggacagtat
2901  ttgttatctg  cgtctcgtcg  aagccagtta  ccttccgaaa  aagagttggt  agctcttctg  ccggcaaca  aaccaccgct  ggtagcggg  gttttttgt
3001  ttgcaagcag  cagattacgc  gcagaaaaaa  aggatctcaa  gaagatcctt  tgatcttttc  tacggggtct  gacgctcag  ggaacgaaa  ctccagttaa
3101  gggatttttg  tcatgagatt  atcaaaaagg  atcttccact  agatcctttt  aaataaaaa  tgaagtttta  aatcaatcct  aagtataat  gagtaaactt
3201  ggtctgacag  ttaccaatgc  ttaatcagtg  aggcacctat  ctccagcagc  tctctatttc  gttcatccat  agttgcctga  ctcccctgct  tgtagataac
3301  tacgatacgg  gaggccttac  catctggccc  cagtgtctga  atgataccgc  gagaccacg  ctaccggct  ccagatttat  cagcaataaa  ccagccagcc
3401  ggaagggcgc  agcgcagaag  tggctctgca  actttatccg  cctccatcca  gctctattaat  tgttgcggg  aagctagagt  aagtagttcg  ccagttaata
3501  gtttgcgcaa  cgttgttggc  attgctacag  gcatcgtggt  gtcacgctcg  tcgtttggta  tggcttcatt  cagctccggg  tcccacagat  caaggcagat
3601  tacatgatcc  cccatgttgt  gcaaaaaagg  ggttagctcc  ttcggtcctc  cgtctgtgt  cagaagtaag  ttggcccgag  tgttatcact  catggttatg
3701  gcagcactgc  ataattctct  tactgtcatg  ccactccgta  gatgcttttc  tgtgactggt  gactactcaa  ccaagtcatt  ctgagaatag  tgtatcgggc
3801  gaccgagttg  ctcttggccc  gcgtcaatac  gggataatac  cgcgccacat  agcagaactt  taaaagtgtc  catcattgga  aaacgttctt  cggggcgaaa
3901  actctcaagg  atcttaaccg  tgttgagatc  cagttcgtat  taaccactc  gtcaccocaa  ctgatcttca  gcatctttta  ctttaccag  cgtttctggg
4001  tgagcaaaaa  caggaaggca  aaatgccgca  aaaaagggaa  taagggcgac  acggaaatgt  tgaatactca  tactcttctc  ttttcaatat  tattgaagca
4101  tttatcaggg  ttattgtctc  atgagcggat  acatatttga  atgtatttag  aaaaataaac  aataggggt  tccgcgcaca  tttcccggaa  aagtgccacc
4201  tgacgtctaa  gaaaccatta  ttatcatgac  attaaccctat  aaaaatagcc  gtaacagag  gcccttctg  c

```

> RDC1463 Translated Insert Sequence

```

1   magagpkrra  laapaaeeke  earekmlaak  sadgsapage  gegvtlqrni  tllngvaiiv  gtiigsgifv  tptgvlkeag  spglalvwva  acgvfsviga
101  lcyaelgtti  sksgdyaym  levygslpaf  lklwiellii  rpssqyival  vfatyllkpl  fptcpvpeea  aklvaclcvl  lltavncysv  kaatrvgdaf
201  aaakllalal  iillgfvqig  kgdvsnlpnd  fsfegtkldv  gnivlalysg  lfayggwnyl  nfvteeminp  yrnlplaiii  slpivtlvyy  ltnlayfttl
301  steqmlssea  vavdfgnyhl  gvmswiipvf  vglscfsvn  gslftssrlf  fvgsreghlp  silsmihpql  ltpvpslvft  cvmtllyafs  kdifsvinff
401  sffnwlcval  aiigmiwlrh  rkpelerpik  vnllalpvffi  laclfliavs  fwktpvecgi  gftiilsglp  vyffgwwkn  kpkwllqgif  sttvlcqklm
501  qvvpget

```