

Specifications:

Gene:	<i>h</i> SLC16A1
Accession:	NP_003042
Insert size:	1516bp
Concentration:	10µg at 0.2µg/µL

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.

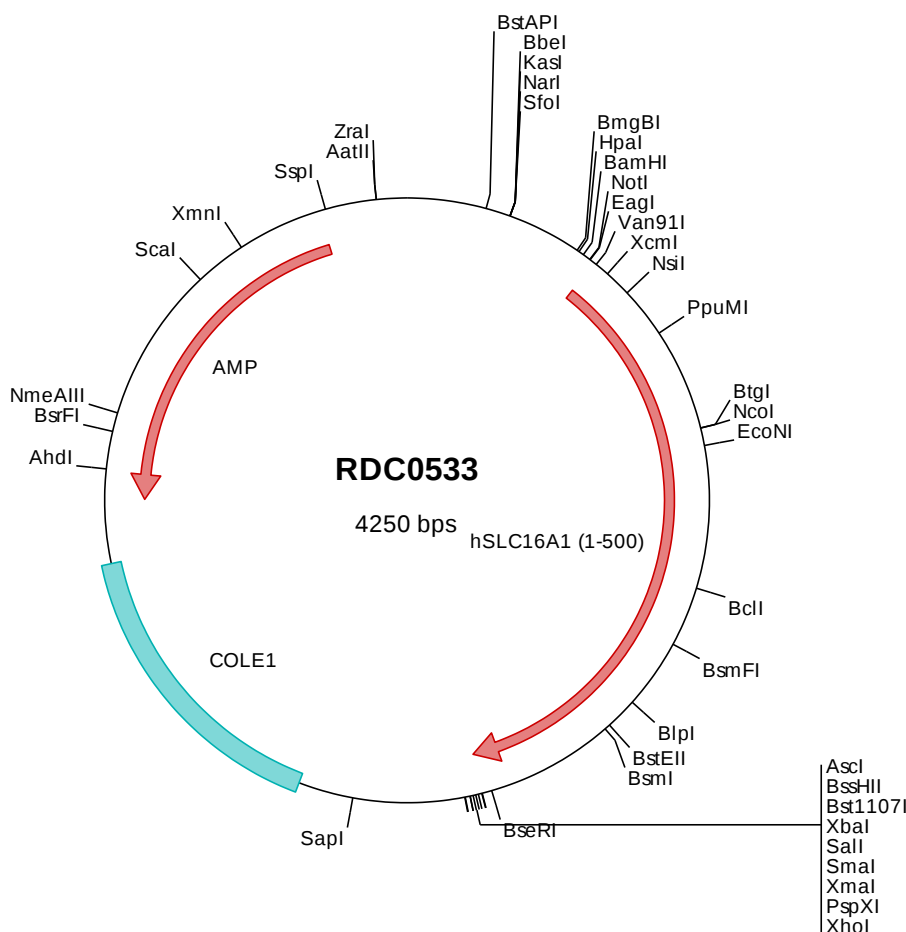
*h*MCT1/SLC16A1 cDNA Plasmid

SLC16A1 solute carrier family 16, member 1 (monocarboxylic acid transporter 1) [*Homo sapiens*]

Also known as: MCT; HHF7; MCT1

Summary:

MCT1/SLC16A1 is a proton-linked monocarboxylate transporter that catalyzes the movement of many monocarboxylates, such as lactate and pyruvate, across the plasma membrane. Mutations in this gene are associated with erythrocyte lactate transporter defect. SLC16A1 may be a potential therapeutic target combining antimetabolic and anti-angiogenic activities. SLC16A1 blockers could act as HIF-1 inhibitors leading to anti-angiogenic effects.





> RDC0533 Plasmid DNA Sequence

```
1   tcgcgcggtt cggatgatgac ggtgaaaacc tctgacacat gcagctcccc gagacggtca cagcttgtct gtaagcggat gccgggagca gacaagcccc
101  tcaggggcgc tcagcgggtg ttggcgggtg tcggggctgg cttactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
201  ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aaggcgcatc ggtgcgggcc tcttcgctat
301  tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagtgggta acgccagggt tttccagtc acgacgttgt aaaacgacgg ccagtgaatt
401  ggagacgtgt taacaagctt ggatccgata tgcgtagcgc ggccgcaccc atgccaccag cagttggagg tccagttgga tacacccccc cagatggagg
501  ctggggctgg gcaggtggtaa ttggagcttt cattccatc ggcttctctt atgcatttcc caaatcaatt actgttctot tcaagagat tgaaggtata
601  ttccatgccca ccaccagcga agtgtcatgg atatcttcca taatgttggc tgtcatgtat ggtggaggto ctatcagcag tatctgtgtg aataaatatg
701  gaagtogtat agtcatgatt gttggtggct gcttgcagg cctgtggctg attgcagctt ctttctgtaa caccgtacag caactatacg tctgtattgg
801  agtcattgga ggtcttgggc ttgcoctcaa cttgaatcca gctctgacca tgattggcaa gtatttttac aagaggcgac cattggccaa cggactggcc
901  atggcaggca gccctgtggt cctctgtact ctggcgcccc tcaatcaggt tttcttcggt atctttggat ggagaggaa ggttcttaatt cttgggggct
1001 tgctactaaa ctgctgtggt gctggagccc tcatcgacc aatcgggccc aagccaacca aggcagggaa agataagtct aaagcatccc ttgagaaagg
1101 tggaaaatct ggtgtgaaaa aagatctgca tgatgcaaat acagatctta ttggaagaca cctaaacaa gagaaacgat cagtcttoca aacaattaat
1201 cagttcctgg acttaacccat attcaaccac agaggctttt tgcataacct ctctggaaat gtgatcatgt tttttggaat ctttgcaact ttggtgttct
1301 ttagtagtta tgggaagagt cagcattatt ctagtggaaa gtctgccttc cttctttcca ttctggcttt tgttgacatg gtgcccgcac catctatggg
1401 aattgtagcc aacacaaagc caataagacc tgaattcag tatttctctt cggcttccgt tgttgcaaat ggagtgtgtc atatgctagc accotttatcc
1501 actaactatg ttggattctg tctctatgct ggattctttg gatttgcctt cgggtggctc agctccgtat tgtttgaaac attgatggac cttgttggac
1601 cccagagggt ctccagcgct gttggatttg tgaccattgt ggaatgtctg cctgtcctcc tggggccacc acttttaggt cggctcaatg acatgatagg
1701 agactacaaa tacacatact gggcatgtgg cgtcgtccta attatttcag gtatctatct ctctatttgc atgggcatac attatcgact ttggcaaaa
1801 gaacagaaag caaacgagca gaaaaaggaa agtaaaaggg aagagaccag tatagatggt gctgggaagc caaatgaaat taccaaaagc gaagaatctc
1901 cagaccagaa agacacagat ggaggggcca aggaggagga aagtccagtc taaaggcgcg ccagtatact ctagagtcca caccggggga attcctcgag
2001 cgctcgcttc tagcttggcg taatcatggt catagctgtt tctgtgtgta aattgttatc cgctcacaat tccacacaa atacgagccg gaagcataaa
2101 gtgtaaaacc tgggggtgct aatgagtgag ctaactcaca ttaattgcgt tgcgctcact gcccgcttto cagtcgggaa acctgtctgt ccagctgcat
2201 taatgaatcg gccaacgcgc ggggagaggc ggtttgcgta ttggggcttc ttcgctctcc tgcctcactg actcgtcgcg ctcggctggt cggctgcggc
2301 gagcgggtatc agctcaactca aaggcggtaa tacggttatc cacagaatca caggataaag caggaaagaa catgtgagca aaagccagc aaaaggccag
2401 gaaccgtaaa aaggccgcgt tgcgtgcgct ttccataggg ctccgcccc ctgacgagca tcacaaaaat cgacgctcaa gtacagaggt gcgaaacccg
2501 acaggactat aaagatacca ggcgtttccc cctggaagct cctcgtgctg ctctctgtgt ccgaccctgc cgttaccgg atacctgtcc gctttctctc
2601 cttcgggaag cgtggcgctt tctcaatgct caocgtgtag gtatctcagt tctgtgtagg tctgttcgct caagctgggc tgtgtgcacg aacccccgtt
2701 tcagcccgac cgtcgcgctt tatccggtaa ctatcgtctt gagtccaacc cggtaagaca cgacttatcg cacttgccag cagccactgg taacaggatt
2801 agcagagcga ggtatgtagg cgtgtctaca gagtcttga agtgggtggc taactacggc tacactagaa ggacagtatt tggtatctgc gctctgctga
2901 agccagttac cttcgaaaaa agagttggta gctcttgatc cggcaacaaa accaccgctg gtacgggtgg tttttttgtt tgcaagcagc agattacgcg
3001 cagaaaaaaa ggatctcaag aagatccttt gatcttttct acggggtctg acgctcagtg gaacgaaaac tcacgttaag ggattttggt catgagatta
3101 tcaaaaagga tcttcaccta gatcctttta aataaaaaat gaagttttta atcaatctaa agtatatatg agtaaaactt gctcgacagt taccaatgct
3201 taatcagtg ggcacctatc tcagcgatct gtctatcttc ttcacccata gttgcctgac tccccgtcgt gtagataact acgatacggg agggcttacc
3301 atctggcccc agtgctgcaa tgataccgcg agaccacgcg tcaccggctc cagatttatc agcaataaac cagccagccg gaagggccga gcgcagaagt
3401 ggtcctgcaa ctttatccgc ctccatccag tctattaatt gttgccggga agctagagta agtagttcgc cagttaatag tttgcgcaac gttgttgcca
3501 ttgctacagg catcgtgggt tcacgctcgt cgtttgggat ggccttcatt agctccggtt cccaacgata aaggcgagtt acatgatccc ccatgttgtg
3601 caaaaaagcg gttagctctc tcggtcctcc gatcgttgtc agaagtaagt tggccgcagt gttatcactc atggttatgg cagcaactgca taattgtctt
3701 actgtctgc cgtccgtaag atgcttttct gtgactgggt agtaactaac caagtcatte tgagaatagt gtatgcggcg accagattgc tcttgcctgg
3801 cgtcaatacg ggataatacc gcgccacata gcagaaactt aaagtgtctc atcatctggaa aacgtttctc ggggcgaaaa ctctcaagga tcttaccgct
3901 gttgagatcc agttcgatgt aacccactcg tgcacccaac tgatcttcag catctttttac tttcaccagc gtttctgggt gatcaaaaac aggaagggaa
4001 aatgccgcaa aaaaagggaat aagggcgaca cggaaatggt gaatactcat actcttccct ttccaatatt attgaagcat tatcgagggt tattgtctca
4101 tgagcggata cataattgaa tgtatttaga aaaaataaca aatagggggt ccgcgcacat tccccgaaa agtgccacct gacgtctaa gaaacattat
4201 tatcatgaca ttaacctata aaaataggcg tatcacgagg ccctttctgt
```

> RDC0533 Translated Insert Sequence

```
1   mppavggpvg ytpdpdggwg avvigafisi gfsyafpxsi tvffkeiegi fhattsevsw issimlavmy gggpissilv nkygsrivmi vggclsgcgl
101  iaasfentvq glyvcigvig glglafnlnd altmigkyfy krrplangla magspvflct laplnqvffg ifgwrsgfli lgglllnccv agalmrpigp
201  kptkagkdks kaslekagks gvkddlhdan tdligrhpqk ekrsvfqtin qfldltlfth rgfllylsgn vimffglfap lvflssygks qhyssksaf
301  llsilafvdm varpsmglva ntkpirpriq yffaasvvan gvchmlapl ttyvgfcvya gffgfafgwl ssvlfetlmd lvpgprfssa vglvtivecc
401  pvllgppllg rlndmygdyk ytywacgvvl iisgiylfig mginyrllak eqkanegkke skeeetsidv agkpnevtk aespqdkdtd ggpkeesepv
```