

Product datasheet for **SC102764**

CAT1 (SLC7A1) (AK022999) Human Untagged Clone

Product data:

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|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | CAT1 (SLC7A1) (AK022999) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | CAT1 |
| Synonyms: | ATRC1; CAT-1; ERR; HCAT1; REC1L |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL5</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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Fully Sequenced ORF: >SC102764 representing AK022999.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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TAATAGACTTTTTCTTATCATATCCCTCATTTCTTTCCCTGAAATAAAAATACACACAAGCAAAAAA  
AATGATAGTTTCACATCTTAGTTCCCTTGCCCAACAAGAATATTCTTAGTCCACTGGCCAGGATT  
TTCTACATAGTCAGAACTTACACATTACTAGAGGCACACCCCAAGGAGTATTGTGTACTTTTAT  
CTGTGCACCAGCCACAAATACCCACATTGGAAAGACCCATTTGTGATGGGTAACATCCCTCTGTCT  
CCCACAACCCCTGTGACTGCCCTGCATGTGTTTCATGACCTCCGAAGGCCAAATTCATGAAGCAGCAA  
CCCAGCAGATCTCCACCCCTGCCTCAGGACCTCTGCTGAAGAGGGGATGAAGTGGGTCTCCAGGGA  
GGCAGTGGGGCCTTGTGGCAGCTGGCTCGGGAGCCGGCTTACAGGAGGGCAGCTCTGCAGTTGGGAG  
GGGCACCGTCCGGAGGAGACCAGGCCTCTACACACCCCTACTTATCATCCCTGCTCACACACC  
CTTGTCCAAGGCTTATGCATCGGATTTATTTTCCAAATCAAGAGGACAGTGATAGATGCATTTCCC  
CAGGCTGTCTCAGAAAGGTGCTAAATGTATACTGTTGTCAGAAATGCTGAGATCTCCCCACTTTTG  
GTTTTGTCAGCAGTAAAACTCTTCCACTGTGACTTATTTTCTCTCAGGCAGCCAGCCACTGGTC  
CCTTGTGTGACTCTAGCACAGTGGCCAGGATCCAATACGAGTCCAGGGGTGACCCAGGATGGTGGGG  
GCAGCGGGCTTCTCCACCTACCCAGCCACCAAGGCCCTGACGCACTGCCTCCTGCACCTTCAGC  
CCCTGTGCACAGCTGGAAGGGTGCATGGCCCGCTCACCTTTGTTTCAGATGGGTGGAACGCTGATGATA  
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TGGACATGCCCATAGGGGCCCCACCCAGACTTAACAGGCAAGGTCTGGGCATTGCGCGACGCAGGAC  
TCAATGCTAAAGCAAGCTGCCTGGCTCTGTGCCAGGGCCCTCTTCTGATTACACATCCCATTTTAA  
CACAGACCCTTCTTCTAATAAAGGCTGACAGTCTGTTGGCAGCCAAGAACCCACACCATGAAGACA  
GGGAGTGAGGGGCCTTTGTGCCAACTCCAGCACAGCTGCGTTCTGGGGTGTGTGAGAGCATGTTCTGT  
GTCTGTGCGCTGGTGGTCTCGTGAGACAGTTCAGAGGACGGGAAATTGCAGGGTGGTGGGGCGTGAG  
GCTTATATGTGGAAGTATGCAGAGTTCGCTGCAGACGGATCTGGATATACACTATGTATAATTGTTA  
CGTGTAATTTAAATATATCTGTTGCCATCGTCATGAGAAGATTATATGAAGGCTCTGAAGGGAGAG  
GGAGATGTACATTCTGCCAGGCTCCTGGGGACCTTATCCGAGTCATGAAATTGATGACTGTTGATCCAG  
TGGTGCAAGAAGCTACACTCCATGTGCATCACGCTTATGACTCCTAATGTATTTTTAAGGCAAAAAAT  
GTCAGCCGACTCCATCTCACCCCTCGATTCTCGAGTCCAGCCTTTCTGTGCCAGTGTCTACTGAGC  
CACAACGCTCTGCCATCGGGACCCGGCTGGGCCTGGAGTCTCGGGGCACAGTGGCATGGAGCCCTCC  
TGGGTCTTCTACAAATGTGCTGAGTGCAGCTGAAAACCCACAGGAGATGGAGTACCTTGGCCAAGC  
TTAAAGAGAAGATTTTCTCAGGGTATTTATTAGTGTGTCAGCAGGGTCAGGAAGCAGGATGGAAGAT  
GCATTCAGACTGTTAATTTATAACAAGGCAAAATGATTTTGTGTTTCTTGATGACAGACTATTAAGTTT  
GGGACTTATTTCCCATTTGAGAAGTTATAATATATATTTAAGATGATAAGTTTCTGCTTAAGTTGTG  
CCTTTCAGCTCAATGAGTTTAAGGAGCACTAAGGGTAATGATACCAATGAGGGTTGGTTTATTATCAA  
ACCTGAATAGCTGTGTTTCTCCAGTAAATATTTTCTTACTGAACATGGAGCCATTATTAAGAGTTG  
TGTGTTTTTATATGTACATTTGTATATTTTTTGTCTGTTTGTGTTCTATTTTTCTAATAGTTTTT  
TTTTAGTTTCTTAAAGTTGTGATACTAGATTTAGATTCTGATGCTAACTGCAAAATCAGGTTGGTCTGT  
CTGGGTCTCCTGCTTTTATTTTACTTTAAGGACAAGTGTAGTTGTGCTCCACCACCTTCAAAAAAT  
GTGAAACTGCCCTGCCTCCCTTTTGTGACAACACTGTGTACATTGACCACTTCTACCATACTTTA  
TGTGTAAATCAAACCTTTTGTGGTACATTATCTCATGCTTCTGCAAATTCGAATAAATCTATGGC  
TTCC
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| 5' Read Nucleotide Sequence: | <p>>OriGene 5' read for AK022999 unedited</p> <pre>TCACATTATGTAATACGACTCACTATAGGGCGGCCGAAATTCGCACGAGGCTGTGTGC GAGGGGAGTGATTTAAGCAATGGTGTCTGGAGTAAGCCTTACAATTTTAAAGACTTTTT CTTATCANNTATCCCTCATNNTTCTTCCCTGCAAATAAAAAACACACAAGCAAAAAA AAATGATAGTTTCACATCTTAGTTCCTTGCCCAAACAAGAATATTCTTAGTTCCTACT GGCCAGGATTTTCTACATAGTCAGAATTACACATTACTAGAGGCACACCCACCAAGGA GTATTGTGTCTACTTTTATCTGTGCACCAGCCAAAATACCCACATTGGAAAGACCCATT TGTGATGGGTAAACATCCCTTCCCTGTCTCCACAAACCCCTGTGACTGCCCTGCATGTGTT CATGACCTCCGAAGGCCAAATTCATGAAGCAGCAAACCCAGCAGATCTCCACCCCTG CCTCAGGACCTCTGCTGAAGAGGGGGATGAAGTGGGTCTCCAGGGAGGCAGTGGGGGCT TGTGGCAGCTGGCTCGGGAGCCGGCTTACAGGAGGGCAGCTCTGCAGTTGGGAGGGCA CCGTCCGGAGGAGACCAGGCCTTACACACCCCCACTCTACTTATCATCCCTGCTCACA CACCTTGTCCAAGGCTTATGCATCGGATTTATTTTCCAAATCAAGAGGACAGTGATA GATGCATTTTCCCAGGCTGTCTCAGAAAGTGCCTAAATGTATACTGTTGTCAGAATTG CTGAGATCTCCCCACTTTTGGTTTTGCAGCAGAAAACTCTTCCACTGTGACTTATTTT CTCTCTCAGCAGCCACCCTGGTCTTGTGCTACTCTACACAGTGGCCAGATCAATAC GATCCAGGTTGACGCAGATGTGGGCGAGNGCTTNTCACTACCCAGCACAAAGCCTGACCA CGCTCTGAC</pre> |
| 3' Read Nucleotide Sequence: | <p>>OriGene 3' read for AK022999 unedited</p> <pre>NCNANGATCGNATTTTTTTTTTTTTTTTTTTCACAGGTAATCCATATAATTTATTCTAATT TGCTTAATCATGATATAATGTACCACAAAATATTTTGATTTTACAACATATTATATGGTA GGAAGTGGTCAATGTACACAGTGTGTGTCAGCAAAAAGGGAGGCAGGGCAGTTTACATTT TTTGAAAGGTGGTGGACGACAACACTACACTTGCCTTAAAGTAAAAATAAAGCAGGAGAGA CCCAGCAAAGACCAACCTGATGTGTGCAGTTAGCATCAAATCTAAATCTAGTATCACAA CTTTAAGAAACTAAAAGAAAATATTAGAAAAATAGAACATCAAACAAGTCAAAAAATA TACAAATGTACATAATAAAAAACACACAACCTTAAATAATGGCTCCATGTTTCAGTAGAAG AAAATATTTACTGGAGAAACCACAGCTATTCAGGTTTGATAATAAACCAACCCCTATTGG TATCATTACCCTTAGTGCTCCTTAAACTCATTGAAGCTGAAAGGCACAACCTTAAACAGGA AACTTATCATCTTAAATATATATTATAACTTCTCAAATGGGAAAAATAAGTCCCAAACTTA ATAGTCTGTGATCAAGAAACACAAAATCATTGTCCTTGTTAATAAATTAACAGTCTGAAT GCATCTTCCATCCTGCTTCCCTGACCCTGCTGGACCACTAATAAATACCCGAGAAAAATC TTCTCTTAAAGCTTGGCCAAGGTAATCCTCCTGTGGGGTTTTTCAGCTGGCACTCAGC ACATTTGTAGAATGACCCAGGAGGGCTCCATGGCAACTGCGCCCCGAGACTCCAGGCCCA TCCGGGTCCCGATGGCGAGAGCGA</pre> |
| Restriction Sites: | NotI-NotI |
| ACCN: | AK022999 |
| Insert Size: | 2626 bp |
| OTI Disclaimer: | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP). |
| Components: | The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water). |

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [AK022999.1](#)

RefSeq Size: 2594 bp

RefSeq ORF: 2626 bp

Locus ID: 6541

Cytogenetics: 13q12.3

Protein Families: Druggable Genome, Transmembrane

MW: 98 kDa

Gene Summary: High-affinity, low capacity permease involved in the transport of the cationic amino acids (arginine, lysine and ornithine) in non-hepatic tissues.[UniProtKB/Swiss-Prot Function]