

Product datasheet for **SC300055**

SUR1 (ABCC8) (NM_000352) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: SUR1 (ABCC8) (NM_000352) Human Untagged Clone
Tag: Tag Free
Symbol: SUR1
Synonyms: ABC36; HHF1; HI; HRINS; MRP8; PHHI; PNDM3; SUR; SUR1; SUR1delta2; TNDM2
Mammalian Cell Selection: None
Vector: pCMV6-XL6
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_000352 edited
 ATGCCCCGGCCTTCTGCGGCAGCGAGAACCCTCGGCCGCTACCGGGTGGACCAGGGG
 GTCCCTCAACAACGGCTGCTTTGTGGACGGCTCAACGTGGTGCCGCACGTCTTCCTACTC
 TTCATCACCTTCCCCTCCTTTCATTGGATGGGGAAGTCAGAGCTCCAAGGTGCACATC
 CACCACAGCACATGGCTTCATTTCCCGGGCACAACTGCGGTGGATCCTGACCTTCATG
 CTGCTCTTCGCTCGTGTGTGAGATTGCAGAGGGCATCCTGTCTGATGGGGTGACCGAA
 TCCCACCCTGCACCTGTACATGCCAGCCGGGATGGCGTTCATGGCTGCTGCACCTCC
 GTGGTCTACTATCACAACATCGAGACTTCCAACCTCCCAAGCTGCTAATTGCCCTGCTG
 GTGATTGGACCCTGGCCTTCATCACCAGACCATCAAGTTTGTCAAGTCTTGGACCAC
 GCCATCGGCTTCTCGCAGCTACGCTTCTGCCTCACAGGGCTGCTGGTGATCCTCTATGGG
 ATGCTGCTCCTCGTGGAGGTCAATGTCATCAGGGTGAGGAGATACATCTTCTCAAGACA
 CCGAGGGAGGTGAAGCCTCCCGAGGACCTGCAAGACCTGGGGGTACGCTTCTGACGCC
 TTCGTGAATCTGCTGTCCAAAGGCACCTACTGGTGGATGAACGCCTTCATCAAGACTGCC
 CACAAGAAGCCATCGACTTGCAGCCATCGGGAAGCTGCCCATCGCCATGAGGGCCCTC
 ACCAACTACCAACGGCTCTGCGAGGCCTTTGACGCCAGGTGCGGAAGGACATTCAGGGC
 ACTCAAGGTGCCCGGCCATCTGGCAGGCACTCAGCCATGCCTTCGGGAGGCGCCTGGTC
 CTCAGCAGCACTTCCGCATCTTGGCCGACCTGCTGGGCTTCGCCGGGCCACTGTGCATC
 CTCGGGGTTTACTTTGTCTCATCCAAGAGTTCCTTGCCAATGCCTACGCTTATAGCTGTG
 CTCTGTCTTGCCTCCTACTGCAAAGGACATTTCTGCAAGCATCCTACTATGTGGCC
 ATTGAAACTGGAATTAATTGAGAGGAGCAATACAGACCAAGATTTACAATAAAATTATG
 CACCTGTCCACCTCCAACCTGTCCATGGGAGAAATGACTGCTGGACAGATCTGTAATCTG
 GTTGCCATCGACACCAATCAGCTCATGTGGTTTTTCTTCTTGTGCCCAAACCTCTGGGCT
 ATGCCAGTACAGATCATTGTGGGTGTGATTCTCCTCTACTACATACTCGGAGTCAGTGCC
 TTAATTGGAGCAGCTGTCATCATTCTACTGGCTCCTGTCCAGTACTTCGTGGCCACCAAG
 CTGTCTCAGGCCAGCGGAGCACACTGGAGTATCCAATGAGCGGCTGAAGCAGACCAAC
 GAGATGCTCCGGGCATCAAGCTGCTGAAGCTGTACGCCCTGGGAGAACATCTTCCGCACG



[View online »](#)

CGGGTGGAGACGACCCGAGGAAGGAGATGACCAGCCTCAGGGCCTTTGCCATCTATACC
 TCCATCTCCATTTTCATGAACACGGCCATCCCCATTGCAGCTGTCTCATAAATTTTCGTG
 GGCCACGTGAGCTTCTTCAAAGAGGGCCGACTTCTCGCCCTCCGTGGCCTTTGCCTCCCTC
 TCCCTCTTCCATATCTTGGTCACACCGCTGTTCTGTGTCCAGTGTGGTCCGATCTACC
 GTCAAAGCTCTAGTGAGCGTGCAAAAGCTAAGCGAGTTCTGTCCAGTGCAGAGATCCGT
 GAGGAGCAGTGTGCCCCCATGAGCCCACACCTCAGGGCCAGCCAGCAAGTACCAGGCG
 GTGCCCTCAGGGTTGTGAACCCGAAGCGTCCAGCCCGGGAGGATTGTGCGGGCCTCACC
 GGCCCACTGCAGAGCCTGGTCCCAAGTGCAGATGGCGATGCTGACAACTGCTGTGTCCAG
 ATCATGGGAGGCTACTTACGTGGACCCAGATGGAATCCCCACACTGTCCAACATCACC
 ATTCGTATCCCCGAGGCCAGCTGACTATGATCGTGGGGCAGGTGGGCTGCGGCAAGTCC
 TCGCTCCTTAGCCGCACTGGGGGAGATGCAGAAGGTCTCAGGGGCTGTCTTCTGGAGC
 AGCCTTCTGACAGCGAGATAGGAGAGGACCCAGCCAGAGCGGGAGACAGCGACCCGAC
 TTGGATATCAGGAAGAGAGGCCCGTGGCCTATGCTTCGCAGAAACCATGGCTGCTAAAT
 GCCACTGTGGAGGAGAACATCATCTTTGAGAGTCCCTTCAACAAACAACGGTACAAGATG
 GTCATTGAAGCCTGCTCTCTGCAGCCAGACATCGACATCTGCCCATGGAGACCAGACC
 CAGATTGGGGAACGGGGCATCAACCTGTCTGGTGGTCAACGCCAGCGAATCAGTGTGGCC
 CGAGCCCTCTACCAGCAGCCAAACGTTGTCTTCTTGGATGACCCCTTCTCAGCTCTGGAT
 ATCCATCTGAGTGACCACTTAATGCAGGCCGGCATCCTTGAGCTGCTCCGGGACGACAAG
 AGGACAGTGGTCTTAGTGACCCACAAGCTACAGTACCTGCCCCATGCAGACTGGATCATT
 GCCATGAAGGATGGCACCATCCAGAGGGAGGGTACCCTCAAGGACTTCCAGAGGTCTGAA
 TGCCAGCTCTTTGAGCACTGGAAGACCCCTCATGAACCGACAGGACCAAGAGCTGGAGAAG
 GAGACTGTACAGAGAGAAAAGCCACAGAGCCACCCAGGGCCTATCTCGTGCCATGTCC
 TCGAGGGATGGCCTTCTGCAGGATGAGGAAGAGGAGGAAGAGGAGCAGCTGAGAGCGAG
 GAGGATGACAACCTGTCTGCCATGCTGCACAGCGTGTGAGATCCCATGGCGAGCTGCG
 GCCAAGTACCTGTCTCCGCCGGCATCCTGCTCCTGTCTGTTGCTGGTCTTCTCACAGCTG
 CTCAAGCACATGGTCTGGTGGCCATCGACTACTGGTGGCCAAGTGGACCGACAGCGCC
 CTGACCCTGACCCTGCAGCCAGGAACTGCTCCCTCAGCCAGGAGTGCACCCTCGACCAG
 ACTGTCTATGCCATGGTGTTCACGGTGTCTGCAGCCTGGGCATTGTGCTGTGCCTCGTC
 ACGTCTGTCACTGTGGAGTGGACAGGGCTGAAGGTGGCCAAGAGACTGCACCGCAGCCTG
 CTAACCCGGATCATCCTAGCCCCATGAGGTTTTTTGAGACCACGCCCTTGGGAGCATC
 CTGAACAGATTTTCATCTGACTGTAACACCATCGACCAGCACATCCCATCCACGCTGGAG
 TGCTGAGCCCGTCCACCCTGCTGTGTCTCAGCCCTGGCCGTATCTCCTATGTCACA
 CCTGTGTTCTCTGTTGGCCCTCTTCCCCCTGGCCATCGTGTGCTACTTCATCCAGAAGTAC
 TTCCGGGTGGCGTCCAGGGACCTGCAGCAGCTGGATGACACCACCCAGCTTCCACTTCTC
 TCACACTTTGCCGAAACCGTAGAAGGACTACACCACATCCGGGCCTTCAGGTATGAGGCC
 CGGTTCCAGCAGAAGCTTCTCGAATACACAGACTCCAACAACATTGCTTCCCTCTTCTC
 ACAGCTGCCAACAGATGGCTGGAAGTCCGAATGGAGTACATCGGTGCATGTGTGGTGCTC
 ATCGCAGCGGTGACCTCCATCTCCAACCTCCCTGCACAGGGAGCTCTCTGCTGGCCTGGTG
 GGCCTGGGCCTTACCTACGCCCTAATGGTCTCCAACCTCAACTGGATGGTGGAGGAAC
 CTGGCAGACATGGAGCTCCAGCTGGGGGTGTGAAGCGCATCCATGGGCTCTGAAAACC
 GAGGCAGAGAGCTACGAGGGGCTCCTGGCACCATCGTGTATCCCAAGAAGTGGCCAGAC
 CAAGGGAAGATCCAGATCCAGAACCTGAGCGTGCCTACGACAGCTCCCTGAAGCCGGTG
 CTGAAGCAGTCAATGCCCTCATCGCCCTGGACAGAAGATCGGGATCTGCGGCCGACCC
 GGCAGTGGGAAGTCTCCTTCTCTTTCCTTCCGCATGGTGGACACGTTTGAAGGG
 CACATCATCATTGATGGCATTGACATCGCCAACTGCCGCTGCACACCCTGCGCTCACGC
 CTCTCCATCATCTGCAGGACCCCGTCTCTTTCAGCGGCACCATCCGATTTAACCTGGAC
 CCTGAGAGGAAGTGTCTCAGATAGCACACTGTGGGAGGCCCTGAAAATCGCCAGCTGAAG
 CTGGTGGTGAAGGCACTGCCAGGAGGCCTCGATGCCATCATCACAGAAGCGGGGAGAAT
 TTCAGCCAGGGACAGAGGCGAGCTGTTCTGCCTGGCCCGGGCCTTCGTGAGGAAGACCAGC
 ATCTTCATCATGGACGAGGCCACGGCTTCCATTGACATGGCCACGGAAAACATCTCCAA
 AAGGTGGTGTGACAGCCTTCGCAGACCGCACTGTGGTACCATCGCGCATCGAGTGCAC
 ACCATCTGAGTGCAGACCTGGTGTCTGCTGAAGCGGGGTGCCATCCTTGAGTTCGAT

AAGCCAGAGAAGCTGCTCAGCCGGAAGGACAGCGTCTTCGCCTCCTTCGTCCGTGCAGAC
AAGTGA

Restriction Sites: Please inquire

ACCN: NM_000352

Insert Size: 4900 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: [NM_000352.2](#), [NP_000343.1](#)

RefSeq Size: 4977 bp

RefSeq ORF: 4935 bp

Locus ID: 6833

UniProt ID: [Q09428](#)

Cytogenetics: 11p15.1

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: ABC transporters, Type II diabetes mellitus

Gene Summary:

The protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MRP subfamily which is involved in multi-drug resistance. This protein functions as a modulator of ATP-sensitive potassium channels and insulin release. Mutations in the ABCC8 gene and deficiencies in the encoded protein have been observed in patients with hyperinsulinemic hypoglycemia of infancy, an autosomal recessive disorder of unregulated and high insulin secretion. Mutations have also been associated with non-insulin-dependent diabetes mellitus type II, an autosomal dominant disease of defective insulin secretion. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jul 2020]

Transcript Variant: This variant (2) uses an alternate in-frame splice site in the 5' coding region compared to variant 3. The encoded isoform (2) is shorter than isoform 3. Isoforms 2 and 4 are the same length but differ in sequence.