

## Product datasheet for RC240180

### SUR1 (ABCC8) (NM\_001287174) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SUR1 (ABCC8) (NM_001287174) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SUR1
Synonyms:	ABC36; HHF1; HI; HRINS; MRP8; PHH1; PNDM3; SUR; SUR1; SUR1delta2; TNDM2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC240180 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCCTGGCCTTCTGCGGCAGCGAGAACCACTCGGCCGCTACCGGGTGGACCAGGGGGTCTCAACA  
ACGGCTGCTTTGTGGACGCGCTCAACGTGGTGCCGACGTCTTCTACTTTCATCACCTCCCCATCCT  
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CACAACCTGCGGTGGATCCTGACCTTCATGCTGCTCTTCGTCCTGGTGTGTGAGATTGCAGAGGGCATCC  
TGCTGATGGGGTGACCGAATCCACCATCTGCACCTGTACATGCCAGCCGGGATGGCGTTCATGGCTGC  
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TATTCCAATGAGCGGCTGAAGCAGACCAACGAGATGCTCCGCGGCATCAAGCTGCTGAAGCTGTACGCCCT  
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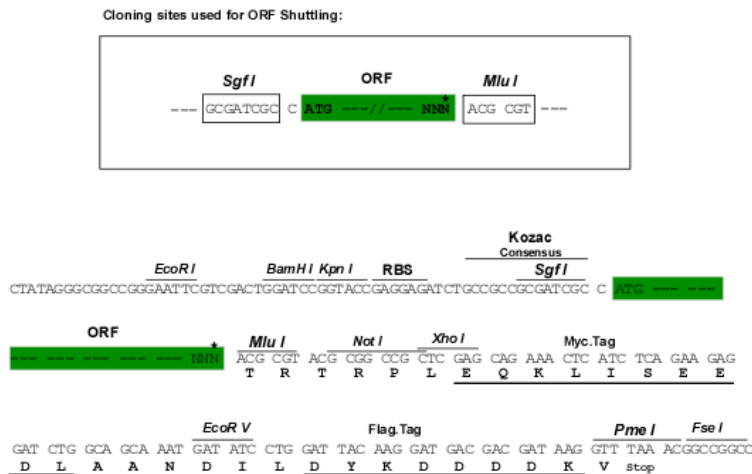
**Protein Sequence:** >RC240180 protein sequence  
 Red=Cloning site Green=Tags(s)

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 HNLRWILTFMLLFVLVCEIAEGLSDGVTESHLHLMPAGMAFMAAVTSVYYYYNIETS NFPKLLIALL  
 VYWTAFITKTIKFKVFLDHAIGFSQLRFCLTGLLVILYGMILLVEVNVIRVRRYIFFKTPREVKPPEDL  
 QDLGVRFLQPFVNLKSGTYWMMNAFIKTAHKPIDLRAIGKLP IAMRAL TNYQRLCEAFDAQVRKDIQG  
 TQGARA IWQALSHAFGRRLVLSSTFRILADLLGFAGPLCIFGIVDHLGKENDVFQPKTQFLGVYFVSSQE  
 FLANAYVLAVLLFLALLLQRTFLQASYYVAIETGINLRGAIQTKIYNKIMHLSTSNLSMGEMTAGQICNL  
 VAIDTNQLMWWFFLCPNLWAMPVQIIVGVILLYILGVSALIGA AVIILLAPVQYFVATKLSQAQRSTLE  
 YSNERLKQTNEMLRGIKLLKYAWENIFRTRVETTRKEMTS LRAFAIYTSISIFMNTAIPAAV LITFV  
 GHVSFFKEADFPSVAFASLSLFHILVTPFLSSVVRSTVKALVSVQKLSEFLSSAEIREEQCAPHEPT  
 PQGPASKYQAVPLRVNKRKRPAREDCRGLTGPLQSLVPSADGDADNCCVQIMGGYFTWTPDGIPTLSNIT  
 IRIPRGQLTMIVGQVGC GKSSLLAALGEMQKVS GAVFWSSSLPDSEIGEDPSPERETATDLDIRKRPV  
 AYASQKPWLLNATVEENIIFESPFNKQRYKMVIEACSLQPDIDILPHGDQTQIGERGINLSGGQRQRISV  
 ARALYQHANVFLDDPFSALDIHLS D HLMQAGILELLRDKRTVVLVTHKLQYLPHADWIIAMKDGTIQR  
 EGTLKDFQRSECQLFEHWKTLMNQRDQELEKETVTERKATEPPQGLSRAMSSRDGLLQDEEEEEEEAAES  
 EEDDNLSMHLHQRAEIPWRACAKYLSAGILLLSLLVFSQLLKHMLVAIDYWLAKWTD SALTTPAARN  
 CSLSQECTLDQTYAMVFTVLC SLGIVLCLVTSVTVEWTGLKVAKRLHRSLLNRIILAPMRFFETPLGS  
 ILNRFSSDCNTIDQHIPSTLECLSRSTLLCVSALAVISYVTPVFLVALLPLAIVCYFIQKYFRVASRDLQ  
 QLDDTTQLPLLSHFAETVEGLTTRAFRYEARFQKLE YTDSNNIASLFLTAANRWLEVRMEYIGACVV  
 LIAAVTSISNSLHREL SAGLVGLGLTYALMVS NYLNMVVRNLADMELQLGAVKRIHGLLKTEAESYEGLL  
 APSLIPKNWPDQKIQIQNL SVRYDSSLKPV LKHVNAL IAPGQKIGICGRGTSGSKSSF LAFFRMVDTFE  
 GHIIIDGIDIAKLP LHTLRSL S IILQDPVLFSGTIRFNLDPERKCS DSTLWEALEIAQLKLVVKALPGG  
 LDAIITEGGENFSQGRQLFCLARAFVRKTSIFIMDEATASIDMATENILQKVVM TAFADRTVVTIAHRV  
 HTILSADLVIVLKRGAILEFDKPEKLLSRKDSVFASFVRADK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



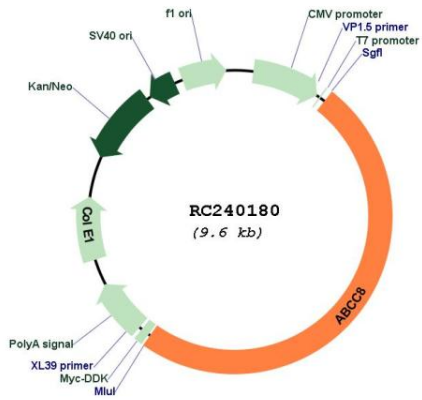
\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001287174

**ORF Size:** 4746 bp

<b>OTI Disclaimer:</b>	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001287174.2</a>
<b>RefSeq Size:</b>	4938 bp
<b>RefSeq ORF:</b>	4749 bp
<b>Locus ID:</b>	6833
<b>UniProt ID:</b>	<a href="#">Q09428</a>
<b>Cytogenetics:</b>	11p15.1
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	ABC transporters, Type II diabetes mellitus
<b>MW:</b>	177.1 kDa
<b>Gene Summary:</b>	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]

Product images:



Circular map for RC240180