

## Product datasheet for **RG240180**

### **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:	TurboGFP
Symbol:	ABCC8
Synonyms:	ABC36; HHF1; HI; HRINS; MRP8; PHHI; PNDM3; SUR; SUR1; SUR1delta2; TNDM2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG240180 representing NM_001287174. Blue=ORF Red=Cloning site Green=Tag(s)

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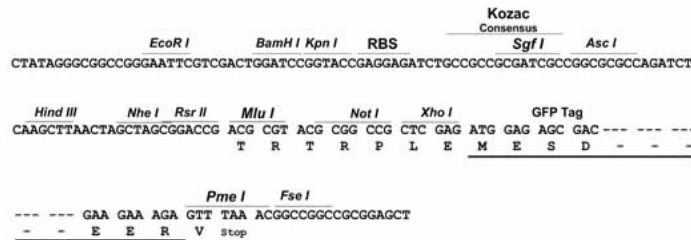
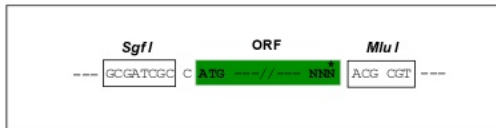
**Protein Sequence:** >Peptide sequence encoded by RG240180  
 Blue=ORF Red=Cloning site Green=Tag(s)

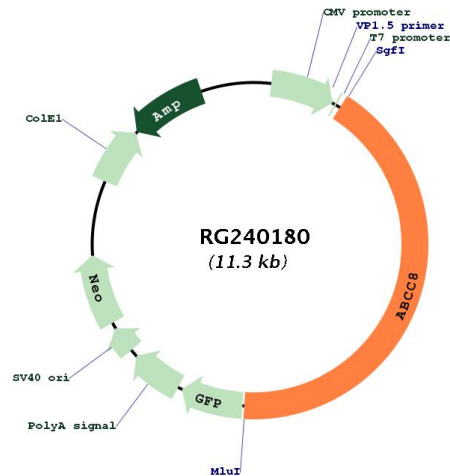
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**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**Plasmid Map:**


**ACCN:** NM\_001287174

**ORF Size:** 4746 bp

**OTI Disclaimer:** 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. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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).

**RefSeq:** [NM\\_001287174.2](#)

**RefSeq Size:** 4938 bp

**RefSeq ORF:** 4749 bp

**Locus ID:** 6833

**UniProt ID:** [Q09428](#)

**Cytogenetics:** 11p15.1

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** ABC transporters, Type II diabetes mellitus

**MW:** 177.1 kDa

**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]