

## Product datasheet for RC220441

### ENSA (NM\_207042) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** ENSA (NM\_207042) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** ENSA  
**Synonyms:** ARPP-19e  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC220441 representing NM\_207042  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTCCCAGAAACAAGAAGAAGAGAACCCTGCGGAGGAGACCGGCGAGGAGAAGCAGGACACGCAGGAGA  
 AAGAAGGTATTCTGCCTGAGAGAGCTGAAGAGGCAAAGCTAAAGGCCAAATACCCAAGCCTAGGACAAAA  
 GCCTGGAGGCTCCGACTTCTCATGAAGAGACTCCAGAAAGGGGATTATAAATCATTACATTGGAGTGTG  
 CTTCTCTGTGCGGATGAAATGCAAAGTACTTTGACTCAGGAGACTACAACATGGCCAAAGCCAAGATGA  
 AGAATAAGCAGCTGCCAAGTGCAGGACCAGACAAGAACCTGGTGACTGGTGATCACATCCCCACCCACA  
 GGATCTGCCCCAGAGAAAGTCTCGCTCGTCACCAGCAAGCTTGGGGTGCCAAGTTGAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC220441 representing NM\_207042  
 Red=Cloning site Green=Tags(s)

MSQKQEEENPAEETGEEKQDTQEKEGILPERAEEAKLKAKYPSLGQKPGGSDFLMKRLQKGDYKSLHWSV  
 LLCADQMKYFDSGDYNMAKAKMKNKQLPSAGPDKNLVTGDHIPTPQDLRQRKSSLVTSKLAGGQVE

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg3846\\_g05.zip](https://cdn.origene.com/chromatograms/mg3846_g05.zip)

**Restriction Sites:** SgfI-MluI



[View online »](#)

**Cloning Scheme:**


**ACCN:** NM\_207042

**ORF Size:** 411 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).

- 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\\_207042.2](#)

**RefSeq Size:** 1300 bp

**RefSeq ORF:** 414 bp

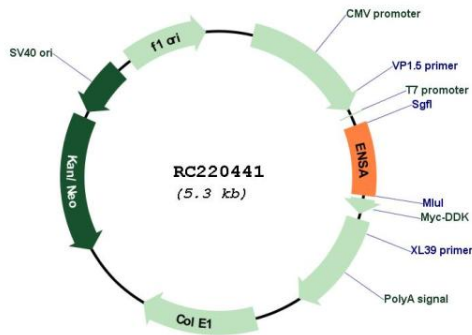
**Locus ID:** 2029

**UniProt ID:** [O43768](#)

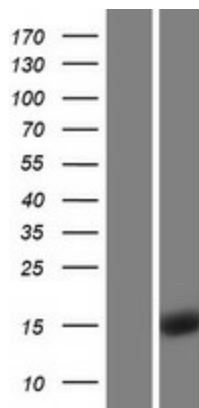
**Cytogenetics:** 1q21.3  
**Protein Families:** Druggable Genome  
**MW:** 15.1 kDa

**Gene Summary:** The protein encoded by this gene belongs to a highly conserved cAMP-regulated phosphoprotein (ARPP) family. This protein was identified as an endogenous ligand for the sulfonylurea receptor, ABCC8/SUR1. ABCC8 is the regulatory subunit of the ATP-sensitive potassium (KATP) channel, which is located on the plasma membrane of pancreatic beta cells and plays a key role in the control of insulin release from pancreatic beta cells. This protein is thought to be an endogenous regulator of KATP channels. In vitro studies have demonstrated that this protein modulates insulin secretion through the interaction with KATP channel, and this gene has been proposed as a candidate gene for type 2 diabetes. At least eight alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008]

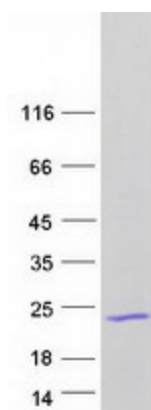
**Product images:**



Circular map for RC220441



Western blot validation of overexpression lysate (Cat# [LY404105]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220441 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ENSA protein (Cat# [TP320441]). The protein was produced from HEK293T cells transfected with ENSA cDNA clone (Cat# RC220441) using MegaTran 2.0 (Cat# [TT210002]).