

## Product datasheet for **RC204260**

### Acetyl CoA synthetase (ACSS2) (NM\_018677) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Acetyl CoA synthetase (ACSS2) (NM_018677) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Acetyl CoA synthetase
Synonyms:	ACAS2; ACECS; AceCS1; ACS; ACSA; dj1161H23.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>RC204260 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

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**Protein Sequence:** >RC204260 protein sequence  
Red=Cloning site Green=Tags(s)

```
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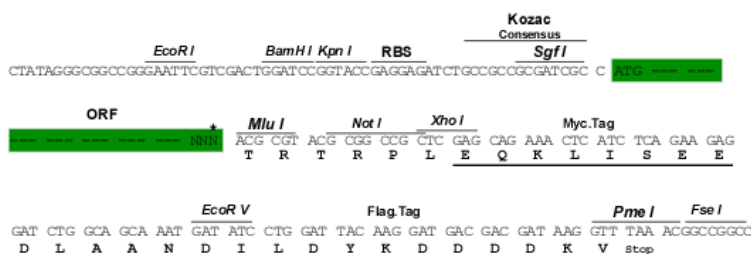
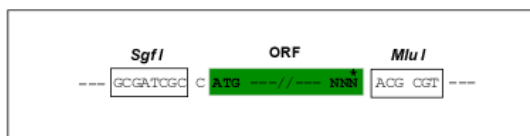
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**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6260\\_h03.zip](https://cdn.origene.com/chromatograms/mk6260_h03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**ACCN:** NM\_018677

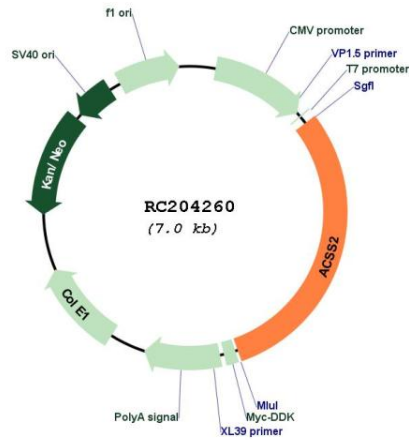
**ORF Size:** 2103 bp

**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](#)

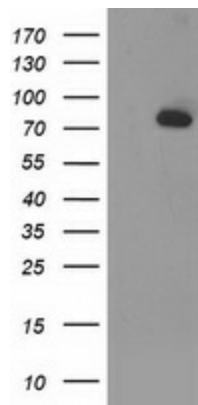
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<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_018677.4</a>
<b>RefSeq Size:</b>	2988 bp
<b>RefSeq ORF:</b>	2106 bp
<b>Locus ID:</b>	55902
<b>UniProt ID:</b>	<a href="#">Q9NR19</a>
<b>Cytogenetics:</b>	20q11.22
<b>Domains:</b>	AMP-binding
<b>Protein Pathways:</b>	Glycolysis / Gluconeogenesis, Metabolic pathways, Propanoate metabolism, Pyruvate metabolism
<b>MW:</b>	78.6 kDa
<b>Gene Summary:</b>	This gene encodes a cytosolic enzyme that catalyzes the activation of acetate for use in lipid synthesis and energy generation. The protein acts as a monomer and produces acetyl-CoA from acetate in a reaction that requires ATP. Expression of this gene is regulated by sterol regulatory element-binding proteins, transcription factors that activate genes required for the synthesis of cholesterol and unsaturated fatty acids. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2009]

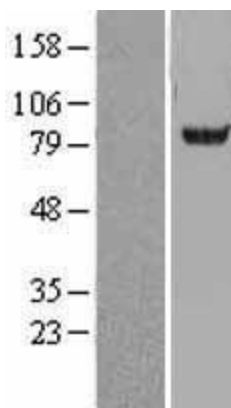
Product images:



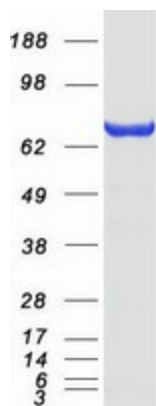
Circular map for RC204260



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ACSS2 (Cat# RC204260, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ACSS2 (Cat# [TA503609]). Positive lysates [LY412981] (100ug) and [LC412981] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY412981]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204260 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ACSS2 protein (Cat# [TP304260]). The protein was produced from HEK293T cells transfected with ACSS2 cDNA clone (Cat# RC204260) using MegaTran 2.0 (Cat# [TT210002]).