

## Product datasheet for RC209534

### HSD17B7 (NM\_016371) Human Tagged ORF Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | HSD17B7 (NM_016371) Human Tagged ORF Clone                        |
| Tag:                      | Myc-DDK   |
| Symbol:                   | HSD17B7   |
| Synonyms:                 | PRAP; SDR37C1   |
| Mammalian Cell Selection: | Neomycin  |
| Vector:                   | pCMV6-Entry (PS100001)  |
| E. coli Selection:        | Kanamycin (25 ug/mL)  |
| ORF Nucleotide Sequence:  | >RC209534 ORF sequence<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGCGAAAGGTGGTTTTGATCACCGGGCTAGCAGTGGCATTGGCCTGGCCCTCTGCAAGCGGCTGCTGG  
CGGAAGATGATGAGCTTCATCTGTGTTGGCGTGCAGGAACATGAGCAAGGCAGAAGCTGTCTGTGCTGC  
TCTGTGGCCTCTACCCCACTGCTGAGGTACCATTGTCCAGGTGGATGTCAGCAACCTGCAGTCGGTC  
TTCCGGGCTCCAAGGAACCTAAGCAAAGTTTTAGAGATTAGACTGTATATATCTAAATGCTGGGATCA  
TGCCCTAATCCACAATAAATCAAAGCACTTTTCTTTGGCCTCTTTCAAGAAAAGTGATTCATATGTT  
CTCCACAGCTGAAGGCCTGCTGACCCAGGTGATAAGATCACTGCTGATGGACTTCAGGAGGTGTTTGAG  
ACCAATGTCTTTGGCCATTTATCCTGATTCGGGAACTGGAGCCTCTCCTCTGTACAGTGACAATCCAT  
CTCAGCTCATCTGGACATCATCTCGAGTGCAAGGAAATCTAATTTAGCCTCGAGGACTTCAGCACAG  
CAAAGGCAAGGAACCTACAGCTCTTCAAATATGCCACTGACCTTTTGAGTGTGGCTTTGAACAGGAAC  
TTCAACCAGCAGGGTCTCTATTTCAAATGTGGCCTGTCCAGGTACAGCATTGACCAATTTGACATATGGAA  
TTCTGCCTCCGTTTATATGGACGCTGTTGATGCCGGAATATTGCTACTTCGCTTTTTGCAAAATGCATT  
CACTTTGACCATATAATGGAACAGAAGCTCTGGTATGGCTTTCCACAAAAGCCTGAATCTCTCAAT  
CCTCTGATCAAATATCTGAGTGCCACTGGCTTTGGAAGAAATATATTATGACCCAGAAGATGGACC  
TAGATGAAGACTGCTGAAAAATTTTATCAAAAAGTTACTGGAAGTGGAAAAGCATTAGGGTCACTAT  
TCAAAAAACAGATAATCAGGCCAGGCTCAGTGGCTCATGCCTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC209534 protein sequence  
Red=Cloning site Green=Tags(s)

MRKVVLITGASSGIGLALCKRLLAEDDELHLCLACRNMSKAEAVCAALLASHPTAEVTIVQVDVSNLQSV  
 FRASKELKQRFQRLDCIYLNAGIMPNPQLNIKALFFGLFSRKVIHMFSTAEGLLTQGDKITADGLQEVFE  
 TNVFGHFILIRELEPLLCHSDNPSQLIWTSSRSARKSNFSLEDFQHSKGKEPYSSSKYATDLLSVALNRN  
 FNQQGLYSNVACPGTALTNLTYGILPPFIWTLMPAILLLRFFANAFTLTPYNGTEALVWLFHQKPESLN  
 PLIKYLSATTGFGRNYIMTQKMDLDEDTAEKIFYQKLELEKHIRVTIQKTDNQARLSGSCL

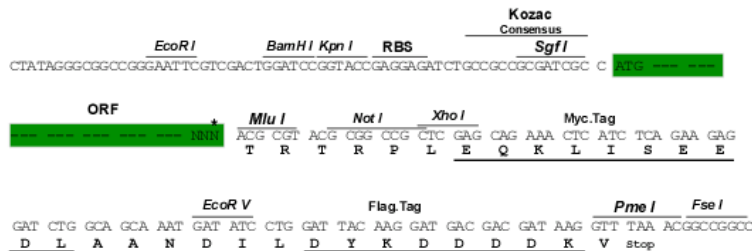
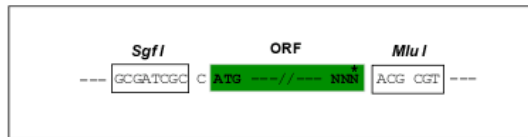
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6356\\_h10.zip](https://cdn.origene.com/chromatograms/mk6356_h10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_016371

**ORF Size:** 1023 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\\_016371.1](#)

**RefSeq Size:** 1533 bp

**RefSeq ORF:** 1026 bp

**Locus ID:** 51478

**UniProt ID:** [P56937](#)

**Cytogenetics:** 1q23.3

**Domains:** adh\_short

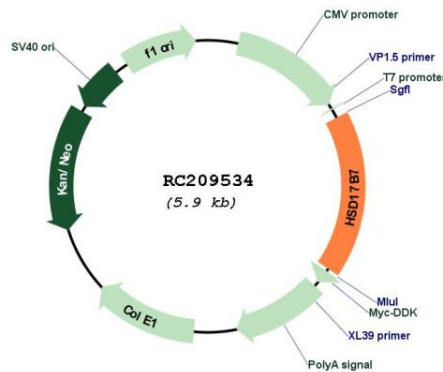
**Protein Families:** Druggable Genome

**Protein Pathways:** Androgen and estrogen metabolism, Metabolic pathways, Steroid biosynthesis

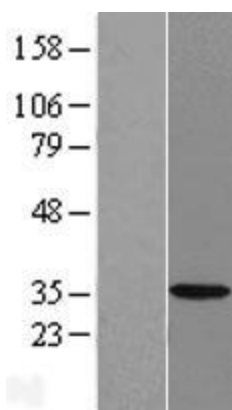
**MW:** 38.2 kDa

**Gene Summary:** HSD17B7 encodes an enzyme that functions both as a 17-beta-hydroxysteroid dehydrogenase (EC 1.1.1.62) in the biosynthesis of sex steroids and as a 3-ketosteroid reductase (EC 1.1.1.270) in the biosynthesis of cholesterol (Marijanovic et al., 2003 [PubMed 12829805]).[supplied by OMIM, May 2010]

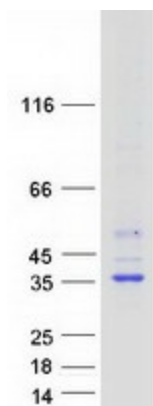
**Product images:**



Circular map for RC209534



Western blot validation of overexpression lysate (Cat# [LY413989]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209534 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HSD17B7 protein (Cat# [TP309534]). The protein was produced from HEK293T cells transfected with HSD17B7 cDNA clone (Cat# RC209534) using MegaTran 2.0 (Cat# [TT210002]).