

## Product datasheet for RC203293

### HSD17B2 (NM\_002153) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HSD17B2 (NM_002153) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HSD17B2
Synonyms:	EDH17B2; HSD17; SDR9C2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203293 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGCACTTTCTCTCGGACACAGCATGGATCTGCCTGGCTGTCCACAGTACTATGTGGGACAGTAT  
TTTGCAAATACAAGAAGAGCTCAGGGCAGCTGTGGAGCTGGATGGTCTGCCTGGCAGGCCTCTGTGCAGT  
CTGCCTGCTCATCTGTCCCTTTTGGGGCTTGATCCTCTTCTCGGTGTCATGCTTCTCATGTATACT  
TACTTATCTGGCCAAGAATTGTTACCTGTGGATCAGAAGGCAGTCTGGTACAGGTGGTATTGCGGGC  
TTGGCCATGCTTTGTGCAAGTATCTGGATGAGCTGGGCTTCACGGTATTTGCCGGAGTTTGAATGAAAA  
TGGCCCAGGAGCTGAGGAATTGCGAAGAACCTGCTCTCCGCGCCTCTCGGTGCTCCAATGGACATCAGG  
AAGCCAGTGCAGATAAAAGATGCTTACAGCAAGTTGCAGCAATGCTGCAGGACAGAGGACTGTGGGCTG  
TGATCAACAATGCTGGGGTGTGGCTTCCAAGTATGAGGAGCTTCTTCTTATGACTGACTACAAACA  
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AAAGGGAGGCTGGTGAATGTGACGAGCATGGGAGGAGGGGCCCAATGAAAGGCTGGCATCTTATGGCT  
CATCAAAGGCGGCTGTGACCATGTTCTCATCAGTTATGAGACTGGAGCTTCCAAGTGGGAAATTAAGT  
TGCTTCCATCCAACCTGGAGCTTCTCAACAAATATCGCAGGCACCAAGTGACAAGTGGGAAAAGCTGGAG  
AAGGACATCTGGACCACCTCCCGCTGAGGTACAGGAAGACTACGGCCAGGACTACATCTTAGCACAGC  
GGAATTTCTCCTATTGATCAACTGTTAGCCAGCAAGGACTTCTCTCCGGTGTGCGGGACATCCAGCA  
TGCTATCTTGGCGAAGAGCCCTTTGCCTATTACACGCCAGGAAAGGCGCTTACTTGTGGATCTGCCTT  
GCTCACTATTTGCCTATTGGCATATATGATTACTTTGCTAAAAGACATTTTGGCCAAGACAAGCCCATGC  
CCAGAGCTCTAAGAATGCCTAACTACAAGAAAAAGGCCACC

**ACGGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC203293 protein sequence  
Red=Cloning site Green=Tags(s)

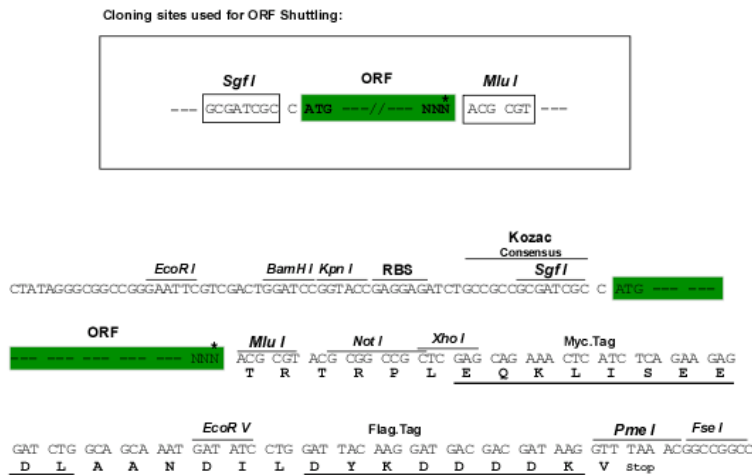
MSTFFSDTAWICLAVPTVLCGTVFCKYKSSGQLWSWMVCLAGLCAVCLLILSPFWGLILFSVSCFLMYT  
 YLSGQELLPVDQKAVLVTGGDCGLGHALCKYLDELGFTVFAGVLNENGPAGEELRRTCSPRLSVLQMDIT  
 KPVIKDAYSKVAAMLQDRGLWAVINNAGVLFPTDGELELLMTDYKQCMVNFVGTVEVTKTFLPLLRKS  
 KGRLVNVSSMGGGAPMERLASYGSSKAAVTMFSSVMRLELSKWGIKVASIQPGGFLTNIAGTSDKWEKLE  
 KDILDHLPAAEVQEDYQDYILAQRNLLLLINSLASKDFSPVLRDIQHAILAKSPFAYYTPGKGAYLWICL  
 AHYLPIGIYDYFAKRHFQDKPMPRALRMPNYKKKAT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6428\\_a01.zip](https://cdn.origene.com/chromatograms/mk6428_a01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



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

**ACCN:** NM\_002153

**ORF Size:** 1161 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\\_002153.3](#)

**RefSeq Size:** 1451 bp

**RefSeq ORF:** 1164 bp

**Locus ID:** 3294

**UniProt ID:** [P37059](#)

**Cytogenetics:** 16q23.3

**Domains:** adh\_short

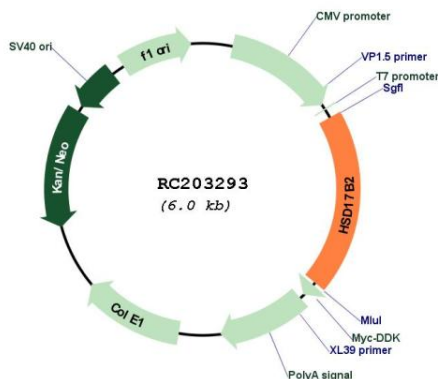
**Protein Families:** Druggable Genome, Transmembrane

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

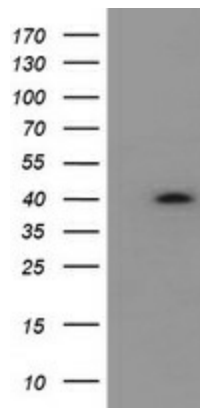
**MW:** 42.8 kDa

**Gene Summary:** Capable of catalyzing the interconversion of testosterone and androstenedione, as well as estradiol and estrone. Also has 20-alpha-HSD activity. Uses NADH while EDH17B3 uses NADPH.[UniProtKB/Swiss-Prot Function]

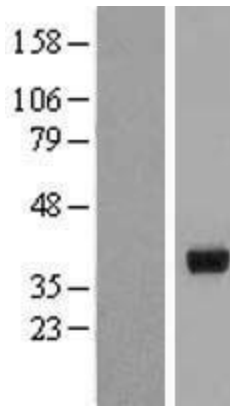
### Product images:



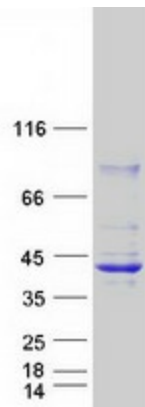
Circular map for RC203293



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HSD17B2 (Cat# RC203293, 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-HSD17B2(Cat# [TA504565]). Positive lysates [LY419500] (100ug) and [LC419500] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419500]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203293 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HSD17B2 protein (Cat# [TP303293]). The protein was produced from HEK293T cells transfected with HSD17B2 cDNA clone (Cat# RC203293) using MegaTran 2.0 (Cat# [TT210002]).