

Product datasheet for **RC212093**

HSD11B1 (NM_181755) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HSD11B1 (NM_181755) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HSD11B1
Synonyms:	11-beta-HSD1; 11-DH; CORTRD2; HDL; HSD11; HSD11B; HSD11L; SDR26C1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212093 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTTTTATGAAAAATATCTCCTCCCCATTCTGGGGCTTTCATGGCCTACTACTACTATTCTGCAA
ACGAGGAATTCAGACCAGAGATGCTCCAAGGAAAGAAAGTGATTGTCACAGGGCCAGCAAAGGGATCGG
AAGAGAGATGGCTTATCATCTGGCGAAGATGGGAGCCCATGTGGTGGTGACAGCGAGGTCAAAGAACT
CTACAGAAGGTGGTATCCACTGCCTGGAGCTTGGAGCAGCCTCAGCACACTACATTGCTGGCACCATGG
AAGACATGACCTTCGCAGAGCAATTTGTTGCCAAGCAGGAAAGCTCATGGGAGGACTAGACATGCTCAT
TCTCAACCACATACCAACACTTCTTTGAATCTTTTTCATGATGATATTCACCATGTGCGCAAAAGCATG
GAAGTCAACTTCCTCAGTTACGTGGTCTGACTGTAGCTGCCTTGCCCATGCTGAAGCAGAGCAATGGAA
GCATTGTTGTCGTCCTCTCTGGCTGGGAAAGTGCTTATCCAATGGTTGCTGCCTATTCTGCAAGCAA
GTTTGCTTTGGATGGGTTCTTCTCCTCCATCAGAAAGGAATTCAGTGTCCAGGGTCAATGTATCAATC
ACTCTCTGTGTTCTTGGCCTCATAGACACAGAAACAGCCATGAAGGCAGTTTCTGGGATAGTCCATATGC
AAGCAGCTCAAAGGAGGAATGTGCCCTGGAGATCATCAAAGGGGAGCTCTGCGCCAGGAAGAAGTGTA
TTATGACAGCTCACTCTGGACCCTCTTCTGATCAGAAAATCCATGCAGGAAGATCCTGGAATTTCTCTAC
TCAACGAGCTATAATATGGACAGATTCAAAACAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC212093 protein sequence
 Red=Cloning site Green=Tags(s)

MAFMKKYLLPILGLFMAYYYYSANEEFRPEMLQGKKVIVTGASKIGREMAYHLAKMGAHVVVTARSKET
 LQKVVSHCLELGAASAHYIAGTMEDMTFAEQFVAQAGKLMGGLDMLILNHITNTSLNLFHDDIHHRKSM
 EVNFLSYVVLVAALPMLKQSNQSVVVVSSLAGKVAYPMVAAYSASKFALDGGFFSSIRKEYSVSRVNVSI
 TLCVLGLIDTETAMKAVSGIVHMQAAPKEECALEIIKGGALRQEEVYDSSLWTTLLIRNPCRKILEFLY
 STSYNMDRFINK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6569_c05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_181755

ORF Size: 876 bp

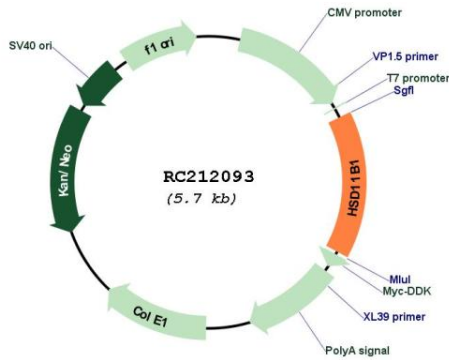
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

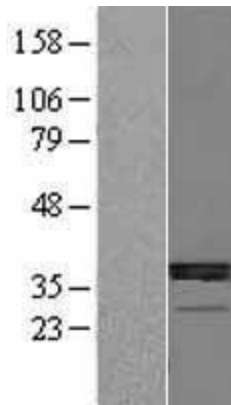
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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_181755.2
RefSeq Size:	1457 bp
RefSeq ORF:	879 bp
Locus ID:	3290
UniProt ID:	P28845
Cytogenetics:	1q32.2
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Androgen and estrogen metabolism, C21-Steroid hormone metabolism, Metabolic pathways
MW:	32.4 kDa
Gene Summary:	<p>The protein encoded by this gene is a microsomal enzyme that catalyzes the conversion of the stress hormone cortisol to the inactive metabolite cortisone. In addition, the encoded protein can catalyze the reverse reaction, the conversion of cortisone to cortisol. Too much cortisol can lead to central obesity, and a particular variation in this gene has been associated with obesity and insulin resistance in children. Mutations in this gene and H6PD (hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)) are the cause of cortisone reductase deficiency. Alternate splicing results in multiple transcript variants encoding the same protein. [provided by RefSeq, May 2011]</p>

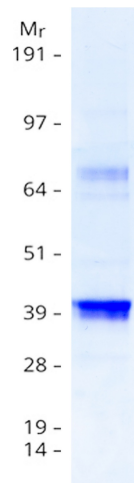
Product images:



Circular map for RC212093



Western blot validation of overexpression lysate (Cat# [LY405624]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212093 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HSD11B1 protein (Cat# [TP312093]). The protein was produced from HEK293T cells transfected with HSD11B1 cDNA clone (Cat# RC212093) using MegaTran 2.0 (Cat# [TT210002]).