

Product datasheet for **RG207796**

HSD11B2 (NM_000196) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HSD11B2 (NM_000196) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HSD11B2
Synonyms:	AME; AME1; HSD2; HSD11K; SDR9C3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG207796 representing NM_000196 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCGCTGGCCTTGGCCGTCGGGGCGCGCCTGGCTGCTCGTGGCTGCCCGCGCCTGCTGCAGCTGC
TGGCCTCAGACCTGCGTCTGGGCGCCCGCTGCTGGCGCGCTGGCGCTGCTGGCCGCGCTCGACTGGCT
GTGCCAGCGCTGCTGCCCGCCGCGCCGACTCGCCGTGCTGGCCGCGCCGGTGGATCGCGTTGTCC
CGCCTGGCGCGCCGAGCGCTGCCGGTGGCCACTCGCGGGTCTCATACCCGGCTGTACTCTGGTT
TTGGCAAGGAGACGGCCAAGAACTGGACTCCATGGGCTTCACGGTGTGCCACCGTATTGGAGTTGAA
CAGCCCCGGTGCCATCGAGCTGCGTACCTGCTGCTCCCTCGCCTAAGGCTGCTGCAGATGGACCTGACC
AAACCAGGAGACATTAGCCGCGTCTAGAGTTCACCAAGGCCACACCAGCACCAGCCGCTGTGGGGCC
TCGTCAACAACGCAGGCCACAATGAAGTAGTTGCTGATGCGGAGCTGTCTCCAGTGGCCACTTTCGGTAG
CTGCATGGAGGTGAATTTCTTTGGCGCGCTCGAGCTGACCAAGGGCTCCTGCCCTGCTGCGCAGCTCA
AGGGGCCGCATCGTACTGTGGGAGCCAGCGGGGACATGCCATATCCGTGCTTGGGGCCATATGGAA
CCTCCAAGCGGCCGTGGCGTACTCATGGACACATTAGCTGTGAACCTCTCCCTGGGGGGTCAAGGT
CAGCATCATCCAGCCTGGCTGCTTCAAGACAGAGTCAGTGAGAAACGTGGGTGAGTGGGAAAAGCGCAAG
CAATTGCTGCTGGCCAACCTGCCTCAAGAGCTGCTGCAGGCTACGGCAAGGACTACATCGAGCACTTGC
ATGGGCAGTTCTGCACTCGCTACGCTGGCCATGTCCGACCTACCCAGTTGTAGATGCCATCACAGA
TGGCCTGCTGGCAGCTCGGCCCGCCGCGCTATTACCCCGCCAGGGCTGGGGCTCATGTACTTCATC
CACTACTACCTGCCTGAAGGCCTGCGGCGCGCTTCTGCAAGCCTTCTCATCAGTCACTGTCTGCCTC
GAGCACTGCAGCCTGGCCAGCCTGGCACTACCCACCACAGGACGCAGCCAGGGCCAAACCTGAGCCC
CGGCCCTTCCCAGCAGTGGCTCGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG207796 representing NM_000196
 Red=Cloning site Green=Tags(s)

MERWPPWPSGGAWLLVAARALLQLLRSDLRLGRPLLAALALLAALDWLCQRLPPPAALAVLAAAGWIALS
 RLARPQRLPVATRAVLITGCDSGFGKETAKKLDMSGFTVLATVLELNSPGAIELRTCCSPRLRLQMDLT
 KPGDISRVLEFTKAHTTSTGLWGLVNNAGHNEVVADAELSPVATFRSCMEVNFNGALELTKGLPLLRSS
 RGRIVTVGSPAGDMPYPCLGAYGTSKAAVALLMDTFSCCELLPWGVKVSIIQPGCFKTESVRNVGQWEKRRK
 QLLLALNPQELLQAYGKDYIEHLHGQFLHSLRLAMSDLTPVVDAITDALLAARPRRRYYPGQGLGLMYFI
 HYYLPEGLRRRFLQAFFISHCLPRALQPQPGTTPPQDAAQGNLSPGSPAVAR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000196

ORF Size: 1215 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_000196.2](#), [NP_000187.2](#)

RefSeq Size: 1944 bp

RefSeq ORF: 1218 bp

Locus ID: 3291

UniProt ID: [P80365](#)

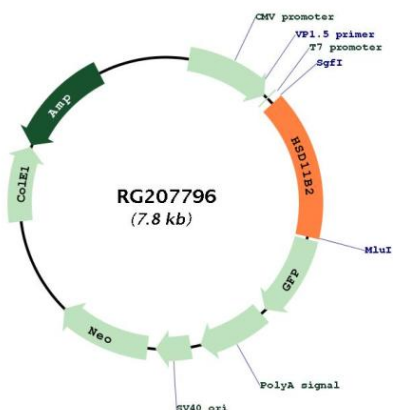
Cytogenetics: 16q22.1

Protein Families: Druggable Genome

Protein Pathways: Androgen and estrogen metabolism, C21-Steroid hormone metabolism, Metabolic pathways

Gene Summary: There are at least two isozymes of the corticosteroid 11-beta-dehydrogenase, a microsomal enzyme complex responsible for the interconversion of cortisol and cortisone. The type I isozyme has both 11-beta-dehydrogenase (cortisol to cortisone) and 11-oxoreductase (cortisone to cortisol) activities. The type II isozyme, encoded by this gene, has only 11-beta-dehydrogenase activity. In aldosterone-selective epithelial tissues such as the kidney, the type II isozyme catalyzes the glucocorticoid cortisol to the inactive metabolite cortisone, thus preventing illicit activation of the mineralocorticoid receptor. In tissues that do not express the mineralocorticoid receptor, such as the placenta and testis, it protects cells from the growth-inhibiting and/or pro-apoptotic effects of cortisol, particularly during embryonic development. Mutations in this gene cause the syndrome of apparent mineralocorticoid excess and hypertension. [provided by RefSeq, Feb 2010]

Product images:



Circular map for RG207796