

Product datasheet for **SC119874**

Hydroxysteroid (17 beta) Dehydrogenase 4 (HSD17B4) (NM_000414) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hydroxysteroid (17 beta) Dehydrogenase 4 (HSD17B4) (NM_000414) Human Untagged Clone
Tag:	Tag Free
Symbol:	Hydroxysteroid (17 beta) Dehydrogenase 4
Synonyms:	DBP; MFE-2; MFP-2; MPF-2; PRLTS1; SDR8C1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC119874 sequence for NM_000414 edited (data generated by NextGen Sequencing)

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ATGGGCTCACCGCTGAGGTTTCGACGGGCGGGTGGTACTGGTCACCGGCGCGGGGCGAGGA
TTGGGCCGAGCCTATGCCCTGGCTTTTGCAGAAAGAGGAGCGTTAGTTGTTGTGAATGAT
TTGGGAGGGGACTTCAAAGGAGTTGGTAAAGGCTCCTTAGCTGCTGATAAGGTTGTTGAA
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GAGGTGGTGAAGAAAGTAAATGCTGATTTGAGTGGCATATAACCAAAGGCGGAAATATT
GGGGCTAAGTGGACTATTGACCTGAAAAGTGGTTCTGGAAAAGTGTACCAAGGCCCTGCA
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GGCAAGCTTGACCCTCAGAAGGCATTCTTTAGTGGCAGGCTGAAGGCCAGAGGGAACATC
ATGCTGAGCCAGAACTTCAGATGATTTTAAAGACTACGCCAAGCTCTGA

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Clone variation with respect to NM_000414.3

5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_000414 unedited NGGTCAGCATTTGTATACGACTCACTATAGGCGGCCGGAATTCGCACCAGGCTTGTTCG TGTGTGTGTCGTTGCAGGCCTTATTCATGGGCTCACCGCTGAGGTTTCGACGGGCGGGTGG TACTGGTCACCGGCGCGGGGCGAGGATTGGGCCGAGCCTATGCCCTGGCTTTTGCAGAAA GAGGAGCGTTAGTTGTTGTAATGATTTGGGAGGGGACTTCAAAGGAGTTGGTAAAGGCT CCTTAGCTGCTGATAAGGTTGTTGAAGAAATAAGAAGGAGAGGTTGAAAAAGCAGTGGCCA ACTATGATTCAGTGAAGAAGGAGAGAGAAGGTTGTGAAGACAGCCCTGGATGCTTTTGGAA GAATAGATGTTGTGGTCAACAATGCTGGAATTCTGAGGGATCGTTCCTTTGCTAGGATAA GTGATGAAGACTGGGATATAATCCACAGAGTTCATTTGCGGGGTTCAATCCAAGTGACAC GGGCAGCATGGGAACACATGAAGAAACAGAAGTATGGAAGGATTATTGACTTCATCAG CTTCAGGAATATATGGCAACTTTGGCCAGGCCAATTATAGTGCTGCAAAGTTGGGTCTTC TGGGCCTTGCAAATTCCTTGAATTGAAGGCAGGAAAAGCAACATTCATTGTAACACCA TTGCTCCTAATGCGGGATCACGGATGACTCAGACAGTTATGCCTGAAGATCTTGTTGAAG CCCTGAAGCCAGAGTATGTGGCACCTCTTGTCTTTGGCTNTGTCACGAGAAGTGTGAGG AGAATGGTGCCTTGTTTGAAGTTGGAGCCAGATGGATTGAAAATTACGCTNGGAGCGACT CTTGNAGCTATTGTAGACAAAGATCACCCCATGACTCCTGAGCAGTCAAGGCTACTGGAG AA</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_000414 unedited GAACGCGGCCGCAATCTATAGTCGAGTTTTTTTTTTTTTTTTTTTTTAAAGTATCAAAGG CCTTTATTGATTTAATTTTCTTTCAACTTATCAATGCTATCACAAATTCTAAGGAAACA GGACTTGGGCAAAATTTTTATTATGAAGATACAGATCTAAGAACAGAAGGATAATTATG TGCTAGCTTATATATAGTTCCTTGTAATAATAATGATACATGAAAAATTAGTAGAAAATG AAAATCTGCAGTTATCTGATATCTGAAAATGTTAAGCAATTTCCCTGCATCTTAGTTCT AATCACTTTTGCAGAATAATCAAGCATATTTGGGTGAAGAGAGTATTTAATGATTCCATT TTTATTAATAGTGTAGTGTGCCCTTCAGAGCTTGGCGTAGTCTTTAAGAATCATCTGAAG TTTCTGGCTCAGCATGATGTTCCCTCTGGCCTTCAGCCTGCCACTAAAGAATGCCTTCTG AGGGTCAAGCTTGCCAGGACCCTCCATGAAATCTTCATCTGAAAAGTATGATTGTTGT ATCAGCAGCACCTTTTGCAGGCGCTTGGTACACTTTTCCAGAACCCTTTTCAAGTCAAT AGTCCACTTAGCCCCAATATTTCCGCTTTGGTTATATGCCACTCAAATACAGCATTAC TTTTTTACCACCTCATGCCAATATCCTTTAAGCGGCGCCCTATTCTCAAATACAAA AGTACTCTGAAACTTCCCGCCTCAGAAGGTGCTTAACTGGAGACCAGAAGTTGGGGCA AGATCCCCATATGCATTTTGAATGACAATGTTTCCCACTCTTTGAACTTGGCTGGAAA AAGAATTCTGTTTCTTCTTACTTCTAATTTGAAAAAGCTGCCCTGGATATATGGTT TTGACAACCAGCCTTATTGGCACTGATCTGGACACCTATTTTCGGAAGTCTGTACACAC GCTGGTAAATCACATGGCATAACCCGTCATGGGCTTGACAAACGGGCACTAG</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_000414
Insert Size:	2590 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_000414.1 , NP_000405.1
RefSeq Size:	2593 bp
RefSeq ORF:	2211 bp
Locus ID:	3295
UniProt ID:	P51659
Cytogenetics:	5q23.1
Domains:	adh_short, MaoC_dehydratas, SCP2
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Primary bile acid biosynthesis
Gene Summary:	<p>The protein encoded by this gene is a bifunctional enzyme that is involved in the peroxisomal beta-oxidation pathway for fatty acids. It also acts as a catalyst for the formation of 3-ketoacyl-CoA intermediates from both straight-chain and 2-methyl-branched-chain fatty acids. Defects in this gene that affect the peroxisomal fatty acid beta-oxidation activity are a cause of D-bifunctional protein deficiency (DBPD). An apparent pseudogene of this gene is present on chromosome 8. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, May 2014]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at an alternate start codon, compared to variant 1. The encoded isoform (2) has a distinct N-terminus and is shorter than isoform 1.</p>