

Product datasheet for SC319196

OriGene Technologies, Inc.

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ERAB (HSD17B10) (NM_001037811) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: ERAB (HSD17B10) (NM_001037811) Human Untagged Clone

Tag: Tag Free
Symbol: ERAB

Synonyms: 17b-HSD10; ABAD; CAMR; DUPXp11.22; ERAB; HADH2; HCD2; HSD10MD; MHBD; MRPP2;

MRX17; MRX31; MRXS10; SCHAD; SDR5C1

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-AC (PS100020)E. coli Selection:Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_001037811.2

CCGGCGACAAGATGGCAGCAGCGTGTCGGAGCGTGAAGGGCCTGGTGGCGGTAATAACCG GAGGAGCCTCGGGCCTGGCCACGGCGGAGCGACTTGTGGGGCAGGGAGCCTCTG CTGTGCTTCTGGACCTGCCCAACTCGGGTGGGGAGGCCCAAGCCAAGAAGTTAGGAAACA ACTGCGTTTTCGCCCCAGCCGACGTGACCTCTGAGAAGGATGTGCAAACAGCTCTGGCTC TAGCAAAAGGAAAGTTTGGCCGTGTGGATGTAGCTGTCAACTGTGCAGGCATCGCGGTGG CTAGCAAGACGTACAACTTAAAGAAGGGCCAGACCCATACCTTGGAAGACTTCCAGCGAG TTCTTGATGTGAATCTCATGGGCACCTTCAATGTGATCCGCCTGGTGGCTGGTGAGATGG GCCAGAATGAACCAGACCAGGGAGGCCAACGTGGGGTCATCATCAACACTGCCAGTGTGG CTGCCTTCGAGGGTCAGGTTGGACAAGCTGCATACTCTGCTTCCAAGGGGGGAATAGTGG GCATGACACTGCCCATTGCTCGGGATCTGGCTCCCATAGGTCTGTTTGGCACCCCACTGC GACTGGGTGACCCTGCTGAGTATGCTCACCTCGTACAGGCCATCATCGAGAACCCATTCC TCAATGGAGAGGTCATCCGGCTGGATGGGGCCATTCGTATGCAGCCTTGAAGGGAGAAGG CAGAGAAAACACACGCTCCTCTGCCCTTCCTTTCCCTGGGGTACTACTCTCCAGCTTGGG AGGAAGCCCAGTAGCCATTTTGTAACTGCCTACCAGTCGCCCTCTGTGCCTAATAAAGTC

AAAAC

Restriction Sites: Please inquire ACCN: NM_001037811



ERAB (HSD17B10) (NM_001037811) Human Untagged Clone - SC319196

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).

This TrueClone is provided through our Custom Cloning Process that includes sub-cloning **OTI Annotation:**

> into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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 001037811.2, NP 001032900.1

RefSeq Size: 936 bp RefSeq ORF: 759 bp Locus ID: 3028 **UniProt ID:** Q99714

Cytogenetics: Xp11.22

Protein Families:

Druggable Genome **Protein Pathways:** Alzheimer's disease, Metabolic pathways, Valine, leucine and isoleucine degradation

Gene Summary: This gene encodes 3-hydroxyacyl-CoA dehydrogenase type II, a member of the short-chain

> dehydrogenase/reductase superfamily. The gene product is a mitochondrial protein that catalyzes the oxidation of a wide variety of fatty acids and steroids, and is a subunit of mitochondrial ribonuclease P, which is involved in tRNA maturation. The protein has been implicated in the development of Alzheimer disease, and mutations in the gene are the cause of 17beta-hydroxysteroid dehydrogenase type 10 (HSD10) deficiency. Several alternatively spliced transcript variants have been identified, but the full-length nature of only two

transcript variants has been determined. [provided by RefSeq, Aug 2014]

Transcript Variant: This variant (2) uses an alternate in-frame splice site in the 3' coding

region, compared to variant 1, resulting in a shorter isoform (2).