

Recombinant Human HSD17B4, His-tagged

Cat. No. HSD17B4-109H **Lot. No.** (See product label)

SPECIFICATION

Product Overview Recombinant Human Peroxisomal Multifunctional Enzyme Type 2/HSD17B4 is produced by our mammalian expression system in human cells. The target protein is expressed with sequence (Gly2-Leu736) of Human HSD17B4 fused with a polyhistidine tag at the C-terminus.

Species Human

Source HEK293

ProteinLength 2-736 a.a.

Description Peroxisomal Multifunctional Enzyme Type 2 (MFE-2) belongs to the short-chain dehydrogenase/reductase (SDR) family. MFE-2 localizes to the peroxisome and contains one MaoC-like domain and one SCP2 domain. MFE-2 can be cleaved into (3R)-hydroxyacyl-CoA dehydrogenase and Enoyl-CoA hydratase 2 chains. MFE-2 acts as a bifunctional enzyme acting on the peroxisomal beta-oxidation pathway for fatty acids. It catalyzes the formation of 3-ketoacyl-CoA intermediates from both straight-chain and 2-methyl-branched-chain fatty acids. Defects in MFE-2 are a cause of D-bifunctional protein deficiency, which is a disorder of peroxisomal fatty acid β -oxidation.

AA Sequence MGSPLRFDGRVVLVTGAGAGLGRAYALFAERGALVVVNDLGGDFKGVGKGS
LAA DKVVEEIRRR G GKAVANYDSVEEGEKVVK TALDAFGRIDVVVNNAGILRDRS
FARIS DEDWDIIHRVHLRGSFQV TRAAWEHMKKQKYGRIIMTSSASGIYGNFGQAN
YSAAK

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

LGLLGLANSLAIEGRKSNIHCNTIAPN AGSRMTQTVMPEDLVEALKPEYVAPLVLWL
 CHESCEENGLFEVAGWIGKLRWERTLGAIVRQK NHPMTPEAVKANWKKICDFE
 NASKPQSIQESTGSIIEVLSKIDSEGGV SANHTSRATSTATSGFA GAIGQKLPPFSYA
 YTELEAIMYALGVGASIKDPKDLKFIYEGSSDF SCLPTFGVIIGQKSMMGGG LAEIPG
 LSINFAKVLHGEQYLELYKPLPRAGKLC EAVVADVLDKSGSVVIIMDVYSYSEKELIC
 HNQFSLFLVSGGGFGGKRTSDKVKVAVAIPNRPPDAVLTDTTSLNQAALYRLSGDW
 NPLHIDPNF ASLAGFDKPIHGLCTFGFSARRVLQQFADNDVSRFKAIKARFAKPVY
 PGQTLQTEMWKEGNRIH FQTKVQETGDIVISNAYVDLAPTS GTS AKTPSEGGKLQS
 T FVFEEIGRRLKDIGPEVVKKVNAVF EWHITKGGNIGAKWTIDLKSGSGKVYQGP
 AAK
 GAADTTIILSDEDFMEVVLGKLDPQKAFFSGRLK ARGNIMLSQKLQ MILKDYAKLVD
 HHHHHH

Endotoxin Less than 0.1 ng/μg (1 IEU/μg).

Purity Greater than 95% as determined by SEC-HPLC and reducing SDS-PAGE.

GENE INFORMATION

Gene Name [HSD17B4 hydroxysteroid \(17-beta\) dehydrogenase 4 \[Homo sapiens \]](#)

Official Symbol HSD17B4

Synonyms

HSD17B4; hydroxysteroid (17-beta) dehydrogenase 4; peroxisomal multifunctional enzyme type 2; 3 alpha; 7 alpha; 12 alpha trihydroxy 5 beta cholest 24 enoyl CoA hydratase; 17 beta HSD IV; 17 beta hydroxysteroid dehydrogenase 4; 17beta estradiol dehydrogenase type IV; beta hydroxyacyl dehydrogenase; beta keto reductase; D 3 hydroxyacyl CoA dehydratase; D bifunctional protein; peroxisomal; DBP; MFE 2; peroxisomal multifunctional protein 2; SDR8C1; short chain dehydrogenase/reductase family 8C; member 1; 17-beta-HSD 4; 17-beta-HSD IV; beta-keto-reductase; multifunctional protein 2; beta-hydroxyacyl dehydrogenase; D-3-

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

hydroxyacyl-CoA dehydratase; D-bifunctional protein, peroxisomal; 17-beta-hydroxysteroid dehydrogenase 4; 17beta-estradiol dehydrogenase type IV; short chain dehydrogenase/reductase family 8C, member 1; 3-alpha,7-alpha,12-alpha-trihydroxy-5-beta-cholest-24-enoyl-CoA hydratase; MFE-2; MPF-2;

Gene ID [3295](#)

mRNA Refseq [NM_000414](#)

Protein Refseq [NP_000405](#)

MIM [601860](#)

UniProt ID [P51659](#)

Chromosome Location 5q2

Pathway Beta-oxidation of pristanoyl-CoA, organism-specific biosystem; Beta-oxidation of very long chain fatty acids, organism-specific biosystem; Bile acid and bile salt metabolism, organism-specific biosystem; Bile acid biosynthesis, cholesterol => cholate, organism-specific biosystem; Bile acid biosynthesis, cholesterol => cholate, conserved biosystem;

Function 3-hydroxyacyl-CoA dehydrogenase activity; 3alpha,7alpha,12alpha-trihydroxy-5beta-cholest-24-enoyl-CoA hydratase activity; estradiol 17-beta-dehydrogenase activity; isomerase activity; long-chain-enoyl-CoA hydratase activity; lyase activity; nucleotide binding; oxidoreductase activity; sterol binding; sterol transporter activity;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA