HSD17B1 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	HSD17B1, Polyclonal Antibody
Full Product Name	HSD17B1 Conjugated Antibody
Product Gene Name	anti-HSD17B1 antibody
Product Synonym Names	HSD17; EDHB17; EDH17B2; SDR28C1
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human
Form/Format	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Specificity	The antibody detects endogenous levels of total HSD17B1 protein.
Preparation and Storage	Store at 4 degree C for 6 months.
Molecular Weight	45kDa
OMIM	109684
3D Structure	ModBase 3D Structure for P14061
Immunogen	Synthetic peptide corresponding to residues near the C terminal of human hydroxysteroid (17-beta) dehydrogenase 1
Conjugation	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Excitation Emission	AF350: 346nm/442nm
Applications Tested/Suitable for anti-HSD17B1 antibody	Most Applications
Application Notes for anti-HSD17B1 antibody	Suggested Dilution: AF350 conjugated: most applications: 1:50-1:250 AF405 conjugated: most applications: 1:50-1:250 AF488 conjugated: most applications: 1:50-1:250 AF555 conjugated: most applications: 1:50-1:250 AF594 conjugated: most applications: 1:50-1:250 AF647 conjugated: most applications: 1:50-1:250 AF680 conjugated: most applications: 1:50-1:250 AF750 conjugated: most applications: 1:50-1:250 Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1:50-1:1000
Related Product Information for anti-HSD17B1 antibody	Hydroxysteroid (17-beta) dehydrogenase 1 catalyzes the final step in the formation of estradiol and testosterone from estrone and androstenedione, respectively. Ovarian granulosa cells and breast tissue both express HSD17B1. Other tissues that express HSD17B1 include testis, placenta, uterus, prostate and adipose tissue. HSD17B1 functions as a homodimer and prefers NADP (H) over NAD (H) for oxidation and reduction. The gene encoding human HSD17B1 maps to chromosome 17q12-q21. The importance of HSD17B1 to estradiol production suggests the specific inhibition of HSD17B1 may aid in breast cancer therapy.
Other Notes	Small volumes of anti-HSD17B1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

Searchable Terms for HSD17B1 purchase	MBS9448074 is an antibody targeting HSD17B1. Also known as HSD17B1 Conjugated Antibody. Reactive in Human. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for HSD17B1. It may not necessarily be applicable to this product.

NCBI GI #	119392083
NCBI GeneID	3291
NCBI Accession #	NP_000187
UniProt Primary Accession #	P14061
UniProt Related Accession #	P80365
GenBank Nucleotide #	NM_000196
NCBI Official Full Name	corticosteroid 11-beta-dehydrogenase isozyme 2
NCBI Official Synonym Full Names	hydroxysteroid 11-beta dehydrogenase 2
NCBI Official Symbol	HSD11B2
NCBI Official Synonym Symbols	AME; AME1; HSD2; HSD11K; SDR9C3
UniProt Protein Name	Estradiol 17-beta-dehydrogenase 1
UniProt Synonym Protein Names	17-beta-hydroxysteroid dehydrogenase type 1; 17-beta-HSD 1; 20 alpha-hydroxysteroid dehydrogenase; 20-alpha-HSD; E2DH; Placental 17-beta-hydroxysteroid dehydrogenase
Protein Family	Estradiol 17-beta-dehydrogenase
UniProt Gene Name	HSD17B1
UniProt Synonym Gene Names	E17KSR; EDH17B1; EDH17B2; EDHB17; 17-beta-HSD 1; 20-alpha-HSD
UniProt Entry Name	DHB1_HUMAN
NCBI Protein Information	corticosteroid 11-beta-dehydrogenase isozyme 2
NCBI Summary for HSD17B1	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]
UniProt Comments for HSD17B1	HSD17B1: Favors the reduction of estrogens and androgens. Also has 20-alpha-HSD activity. Uses preferentially NADH. Belongs to the short-chain dehydrogenases/reductases (SDR) family. Protein type: Lipid Metabolism - androgen and estrogen; EC 1.1.1.62; Oxidoreductase Chromosomal Location of Human Ortholog: 17q11-q21 Cellular Component: nucleoplasm; nuclear membrane; cytoplasm; cytosol Molecular Function: estradiol 17-beta-dehydrogenase activity; catalytic activity; 3-alpha(17-beta)-hydroxysteroid dehydrogenase (NAD+) activity Biological Process: steroid metabolic process; estrogen metabolic process; steroid biosynthetic process; estrogen biosynthetic process

Research Articles on HSD17B1	**1.** Sequence defects (16q22.1) cause Monogenic Hypertension Syndrome in children (with muscle weakness in severe forms)as result of apparent mineralocorticoid excess.
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