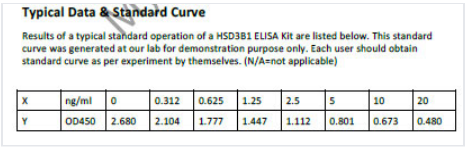
3 Beta-Hydroxysteroid Dehydrogenase/Delta 5-->4-Isomerase Type 1 (HSD3B1) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	3 beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase type 1 (HSD3B1), ELISA Kit
Full Product Name	Human 3 beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase type 1 ELISA Kit
Product Gene Name	HSD3B1 elisa kit
Product Synonym Names	HSD3B1/3 beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase type I (3-beta-HSD I)/Trophoblast antigen FDO161G/3BH/HSDB3A
Species Reactivity	Human
Assay Type	Competitive ELISA, Coated with Antigen
Samples	Serum, Plasma, Cell Culture Supernatant, cell or tissue lysate, Other liquid samples
Detection Range	0.313-20ng/ml
Sensitivity	0.188ng/ml
Specificity	This assay has high sensitivity and excellent specificity for detection of HSD17B1. No significant cross-reactivity or interference between HSD17B1 and analogues is observed.
Preparation and Storage	Store entire kit at 2-8C for short-term. For longer-term, please store the microplate & standard at -20C, while the remaining reagents can be stored at 2-8C
Inter-assay Precision	Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level HSD17B1 were tested on 3 different plates, 8 replicates in each plate. CV (%) = SD/meanX100. Inter-Assay: CV<10%
Intra-assay Precision	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level HSD17B1 were tested 20 times on one plate, respectively. Intra-Assay: CV<8%
Molecular Weight	42,037 Da
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for HSD3B1 elisa kit	Principle of the Assay: This kit was based on Competitive-ELISA detection method. The microtiter plate provided in this kit has been pre-coated with HSD17B1. During the reaction, HSD17B1 in the sample or standard competes with a fixed amount of HSD17B1 on the solid phase supporter for sites on the Biotinylated Detection Antibody specific to HSD17B1. Excess conjugate and unbound sample or standard are washed from the plate, and HRP-Streptavidin (SABC) is added to each microplate well and incubated. Then TMB substrate solution is added to each well. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm. The concentration of HSD17B1 in the samples is then determined by comparing the O D of the samples to the standard curve.
Other Notes	Small volumes of HSD3B1 elisa kit 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 HSD3B1 purchase	MBS761420 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the 3 beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase type 1 (HSD3B1) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing HSD3B1. The ELISA analytical biochemical technique of the MBS761420 kit is based on HSD3B1 antibody-HSD3B1 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect HSD3B1 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, HSD3B1. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Data & Standard Curve

Results of a typical standard operation of a HSD3B1 ELISA Kit are listed below. This standard curve was generated at our lab for demonstration purpose only. Each user should obtain standard curve as per experiment by themselves. (N/A=not applicable)

X	ng/ml	0	0.312	0.625	1.25	2.5	5	10	20
Y	OD450	2.680	2.104	1.777	1.447	1.112	0.801	0.673	0.480

Typical Testing Data/Standard Curve (for reference only) of HSD3B1 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for HSD3B1. It may not necessarily be applicable to this product.

NCBI GI #	59797058
NCBI GeneID	360348
NCBI Accession #	NP_001007720.3
UniProt Secondary Accession #	Q19P43
UniProt Related Accession #	P22071
GenBank Nucleotide #	NM_001007719.3
NCBI Official Full Name	3 beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase type 1
NCBI Official Synonym Full Names	hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase 1
NCBI Official Symbol	Hsd3b1
UniProt Protein Name	3 beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase type 1
UniProt Synonym Protein Names	3 beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase type I; 3-beta-HSD I
Protein Family	3 beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase
UniProt Gene Name	Hsd3b1
UniProt Synonym Gene Names	3-beta-HSD I
UniProt Entry Name	3BHS1_RAT
NCBI Protein Information	3 beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase type 1
UniProt Comments for HSD3B1	3-beta-HSD is a bifunctional enzyme, that catalyzes the oxidative conversion of Delta(5)-ene-3-beta-hydroxy steroid, and the oxidative conversion of ketosteroids. The 3-beta-HSD enzymatic system plays a crucial role in the biosynthesis of all classes of hormonal steroids.
Research Articles on HSD3B1	**1.** Leptin, which inhibits the ovulatory process, caused a significant reduction in the ovarian expression of P450scc without changes in StAR or 3betaHSD.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

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