

Product datasheet for TP505766

Hsd3b1 (NM_008293) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase 1 (Hsd3b1), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR205766 protein sequence Red =Cloning site Green =Tags(s)
	MAGWSCLVGTGAGGFVQGRIIKMLVQEKELEQVRALDKVFRPETKEEFSKLQTKTKVTVLEGDILDAQCLR RACQGISVVIHTAAVIDVTGVIPRQTILDVNLKGTQNLLEACVQASVPAFICSSVDAAGPNSYKKIVLN GHEEQNHSTWSDPYPSKMAEKAVLAANGSMLKNGGTLNTCALRPMYIYGERSPFIFNAIIRALKNKG ILCVTGKFSIANPVYVENVAWAHILAARGLRDPKKSTSIQGQFYISDDTPHQSYDDLNYTLSKEWGLRP NASWSLPLPLYWLAFLLETVSFLLRPVYRPLFNHRHSITLSNSTFTFSYKKAQRDLGYEPLVNWEEAK QKTSEWIGTIVEQHREILDTKCQ
	TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-MYC/DDK
Predicted MW:	42 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u>NP_032319</u>
Locus ID:	15492



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UniProt ID: [P24815](#), [Q3UI20](#)

RefSeq Size: 1852

Cytogenetics: 3 42.89 cM

RefSeq ORF: 1122

Synonyms: 3-beta-HSD I; D3Ertd383e

Summary: A bifunctional enzyme responsible for the oxidation and isomerization of 3beta-hydroxy-Delta(5)-steroid precursors to 3-oxo-Delta(4)-steroids, an essential step in steroid hormone biosynthesis. Specifically catalyzes the conversion of pregnenolone to progesterone, 17alpha-hydroxypregnenolone to 17alpha-hydroxyprogesterone, dehydroepiandrosterone (DHEA) to 4-androstenedione, and androstenediol to testosterone. Additionally, catalyzes the interconversion between 3beta-hydroxy and 3-oxo-5alpha-androstane steroids controlling the bioavailability of the active forms. Specifically converts dihydrotestosterone to its inactive form 5alpha-androstanediol, that does not bind androgen receptor/AR. Also converts androstanedione, a precursor of testosterone and estrone, to epiandrosterone. Expected to use NAD(+) as preferred electron donor for the 3-beta-hydroxy-steroid dehydrogenase activity and NADPH for the 3-ketosteroid reductase activity.[UniProtKB/Swiss-Prot Function]