Recombinant Human HSD11B1

Cat. No. HSD11B1-27736TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length protein, corresponding to amino acids 1-292 of Human HSD11B1, with an N-terminal proprietary tag, predicted MWt 57.86 kDa
Species	Human
Source	Wheat Germ
ProteinLength	292 amino acids
Description	The protein encoded by this gene is a microsomal enzyme that catalyzes the conversion of the stress hormone cortisol to the inactive metabolite cortisone. In addition, the encoded protein can catalyze the reverse reaction, the conversion of cortisone to cortisol. Too much cortisol can lead to central obesity, and a particular variation in this gene has been associated with obesity and insulin resistance in children. Mutations in this gene and H6PD (hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)) are the cause of cortisone reductase deficiency. Alternate splicing results in multiple transcript variants encoding the same protein.
Molecular Weight	57.860kDa inclusive of tags
Tissue specificity	Widely expressed. Highest expression in liver.
Form	Liquid
Purity	Proprietary Purification

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

Storage buffer	pH: 8.00Constituents:0.3% Glutathione, 0.79% Tris HCl
Storage	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
Sequences of amino acids	MAFMKKYLLPILGLFMAYYYYSANEEFRPEMLQGKKVIVT GASKGIGREMAYHLAK MGAHVVVTARSKETLQKVVSHCLE LGAASAHYIAGTMEDMTFAEQFVAQAGKLMG GLDMLILNH ITNTSLNLFHDDIHHVRKSMEVNFLSYVVLTVAALPMLKQ SNGSIVVVS SLAGKVAYPMVAAYSASKFALDGFFSSIRKE YSVSRVNVSITLCVLGLIDTETAMKAV SGIVHMQAAPKEE CALEIIKGGALRQEEVYYDSSLWTTLLIRNPCRKILEFLY STSYN MDRFINK
Sequence Similarities	Belongs to the short-chain dehydrogenases/reductases (SDR) family.

GENE INFORMATION

Gene Name	HSD11B1 hydroxysteroid (11-beta) dehydrogenase 1 [Homo sapiens]
Official Symbol	HSD11B1
Synonyms	HSD11B1; hydroxysteroid (11-beta) dehydrogenase 1; HSD11, HSD11B; corticosteroid 11-beta-dehydrogenase isozyme 1; SDR26C1; short chain dehydrogenase/reductase family 26C; member 1;
Gene ID	3290
mRNA Refseq	NM_001206741
Protein Refseq	NP_001193670

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

MIM	600713
Uniprot ID	P28845
Chromosome Location	1q32-q41
Pathway	Aldosterone-regulated sodium reabsorption, organism-specific biosystem; Aldosterone-regulated sodium reabsorption, conserved biosystem; C21-Steroid hormone biosynthesis, progesterone => cortisol/cortisone, organism-specific biosystem; C21-Steroid hormone biosynthesis, progesterone =>
Function	11-beta-hydroxysteroid dehydrogenase (NADP+) activity; 11-beta-hydroxysteroid dehydrogenase [NAD(P)] activity; nucleotide binding; oxidoreductase 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