

Recombinant Human HSD11B2

Cat. No. HSD11B2-27734TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant fragment of Human HSD11B2 with N-terminal proprietary tag. Mol Wt 36.63 kDa inclusive of tag.
Species	Human
Source	Wheat Germ
ProteinLength	100 amino acids
Description	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.
Molecular Weight	36.630kDa
Tissue specificity	Found in placenta, kidney, pancreas, prostate, ovary, small intestine and colon.

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Form	Liquid
Purity	Proprietary Purification
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	RLARPQRLPVATRAVLITGCDSGFGKETAKKLDSMGFTVLATVLELNSPGAIELRTCC SPRLRLLQMDLTKPGDISRVLEFTKAHTTSTGLWGLVNNAGH
Sequence Similarities	Belongs to the short-chain dehydrogenases/reductases (SDR) family.

GENE INFORMATION

Gene Name	HSD11B2 hydroxysteroid (11-beta) dehydrogenase 2 [Homo sapiens]
Official Symbol	HSD11B2
Synonyms	HSD11B2; hydroxysteroid (11-beta) dehydrogenase 2; corticosteroid 11-beta-dehydrogenase isozyme 2; SDR9C3; short chain dehydrogenase/reductase family 9C; member 3;
Gene ID	3291
mRNA Refseq	NM_000196
Protein Refseq	NP_000187
MIM	614232

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Uniprot ID	P80365
Chromosome Location	16q22
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 [NAD(P)] activity; NAD binding; oxidoreductase activity; steroid binding;

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