

Recombinant Human HSD11B2, GST-tagged

Cat. No. HSD11B2-13953H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human HSD11B2 (1 a.a. - 405 a.a.), fused with GST-tag at N-terminal, was expressed in wheat germ.
Species	Human
Source	Wheat Germ
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 Mass	70.5 kDa
AA Sequence	MERWPWPSGGAWLLVAARALLQLLRSDLRLGRPLLAALALLAALDWLCQRLLPPPA ALAVLAAAGWIALSRLARP QRLPVATRAVLITGCDSGFGKETAKKLDSMGFTVLATV

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LELNSPGAIELRTCCSPRLRLLQMDLTKPGDISRVLE FTKAHTTSTGLWGLVNNAGH
NEVVADAELSPVATFRSCMEVNFFGALELTKGLLPLLRSSRGRIVTVGSPAGDMP Y
PCLGAYGTSKAAVALLMDTFSCCELLPWGVKVSIIQPGCFKTESVRNVGQWEKRKQL
LLANLPQELLQAYGKDYI EHLHGQFLHSLRLAMSDLTPVVDAITDALLAARPRRRYY
PGQGLGLMYFTHYYLPEGLRRRFLQAFFISHCLPRA LQPGQPGTTPPQDAAQDPNL
SPGPSPAVAR

Applications ELISA; WB-Re; AP; Array

Notes Best use within three months from the date of receipt of this protein.

Storage Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Storage Buffer 50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

GENE INFORMATION

Gene Name [HSD11B2 hydroxysteroid \(11-beta\) dehydrogenase 2 \[Homo sapiens \(human\) \]](#)

Official Symbol HSD11B2

Synonyms HSD11B2; AME; AME1; HSD2; HSD11K; SDR9C3; hydroxysteroid (11-beta) dehydrogenase 2; corticosteroid 11-beta-dehydrogenase isozyme 2; 11-DH2; 11-beta-HSD2; -HSD11 type II; 11-beta-hydroxysteroid dehydrogenase type 2; 11-beta-hydroxysteroid dehydrogenase type II; NAD-dependent 11-beta-hydroxysteroid dehydrogenase; short chain dehydrogenase/reductase family 9C member 3; NP_000187.3; EC 1.1.1.146

Gene ID [3291](#)

mRNA Refseq [NM_000196](#)

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Protein Refseq	NP_000187
MIM	614232
UniProt ID	P80365
Chromosome Location	16q22
Pathway	Aldosterone-regulated sodium reabsorption; C21-Steroid hormone biosynthesis, progesterone => cortisol/cortisone; Glucocorticoid & Mineralcorticoid Metabolism
Function	11-beta-hydroxysteroid dehydrogenase [NAD(P)] activity; NAD binding; steroid binding

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