

Active Recombinant Human HSD11B1 Protein, His-tagged

Cat. No. HSD11B1-065H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active recombinant N-terminal His-tagged human HSD11B1 protein was expressed in E. coli.
Species	Human
Source	E.coli
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.
Bio-activity	The activity of 11β-HSD enzyme is defined as total turnover number (nmol product/nmol enzyme/min) during the in vitro conversion of cortisone to cortisol (hydrocortisone) in the presence of NADPH regenerating system (5 mM glucose-6 phosphate, 2U of glucose-6-phosphate dehydrogenase, and 0.5mM of magnesium chloride). The substrate and product were separated in a HPLC using a reverse phase C18-column detected at 245 nm.
Molecular Mass	31.4 kDa

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Purity	≥75% estimated by SDS-PAGE
Stability	≥ 2 year
Storage	At -80 centigrade.
Storage Buffer	50 mM sodium phosphate buffer, pH 7.6, containing 100 mM sodium chloride and 20% glycerol

GENE INFORMATION

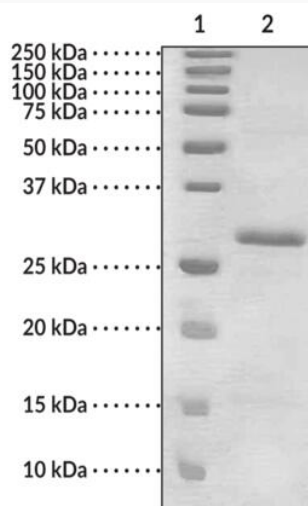
Gene Name	HSD11B1 hydroxysteroid 11-beta dehydrogenase 1 [Homo sapiens (human)]
Official Symbol	HSD11B1
Synonyms	HSD11B1; hydroxysteroid 11-beta dehydrogenase 1; HDL; 11-DH; HSD11; HSD11B; HSD11L; CORTRD2; SDR26C1; 11-beta-HSD1; corticosteroid 11-beta-dehydrogenase isozyme 1; short chain dehydrogenase/reductase family 26C member 1; EC 1.1.1.146
Gene ID	3290
mRNA Refseq	NM_181755
Protein Refseq	NP_861420
MIM	600713
UniProt ID	P28845

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**SDS-PAGE analysis
of 11 β -HSD1**



Lane 1: MW Markers

Lane 2: Purified 11 β -HSD1 (5 μ g)

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