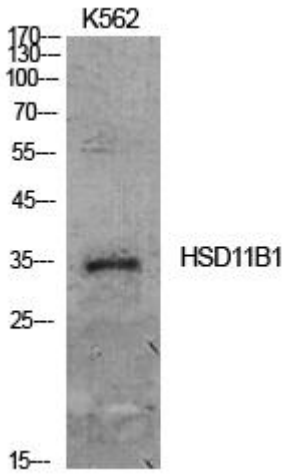
11 β -HSD1 Monoclonal Antibody

Catalog No	YP-mAb-02882
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	HSD11B1
Protein Name	Corticosteroid 11-beta-dehydrogenase isozyme 1
Immunogen	Synthesized peptide derived from 11 β -HSD1 . at AA range: internal
Specificity	11 β -HSD1 Monoclonal Antibody detects endogenous levels of 11 β -HSD1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	HSD11B1; HSD11; HSD11L; Corticosteroid 11-beta-dehydrogenase isozyme 1; 11-beta-hydroxysteroid dehydrogenase 1; 11-DH; 11-beta-HSD1
Observed Band	35kD
Cell Pathway	Endoplasmic reticulum membrane ; Single-pass type II membrane protein .
Tissue Specificity	Widely expressed, highest expression in liver, lower in testis, ovary, lung, foreskin fibroblasts, and much lower in kidney (PubMed:1885595). Expressed in liver (at protein level) (PubMed:21453287). Expressed in the basal cells of the corneal epithelium and in the ciliary nonpigmented epithelium (both at mRNA and at protein level) (PubMed:11481269).
Function	catalytic activity:An 11-beta-hydroxysteroid + NADP(+) = an 11-oxosteroid + NADPH.,disease:Defects in HSD11B1 are a cause of cortisone reductase deficiency (CRD) [MIM:604931]. In CRD, activation of cortisone to cortisol does not occur, resulting in adrenocorticotropin-mediated androgen excess and a phenotype resembling polycystic ovary syndrome (PCOS).,function:Catalyzes reversibly the conversion of cortisol to the inactive metabolite cortisone. Catalyzes reversibly the conversion of 7-ketocholesterol to 7-beta-hydroxycholesterol. In intact cells, the reaction runs only in one direction, from 7-ketocholesterol to 7-beta-hydroxycholesterol.,PTM:Glycosylated.,similarity:Belongs to the short-chain dehydrogenases/reductases (SDR) family.,subunit:Homodimer.,tissue specificity:Widely expressed. Highest

	expression in liver.,
Background	hydroxysteroid 11-beta dehydrogenase 1(HSD11B1) Homo sapiens 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.[provided by RefSeq, May 2011],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using 11β-HSD1 Monoclonal Antibody