



DHI2 Polyclonal Antibody

Catalog No	YP-Ab-05496
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;ELISA
Gene Name	HSD11B2 HSD11K
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	DHI2 Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	11-beta-hydroxysteroid dehydrogenase type II;11-beta-hydroxysteroid dehydrogenase type 2;11-beta-HSD2;11-beta-HSD type II;11 DH2;DHI2; HSD11B2 HSD11K;Corticosteroid 11-beta-dehydrogenase isozyme 2 (EC 1.1.1.-) (11-beta-hydroxysteroid dehydrogenase type 2) (11-DH2) (11-beta-HSD2) (11-beta-hydroxysteroid dehydrogenase type II) (-HSD11 type II) (NAD-d
Observed Band	44kD
Calculated Molecular Weight	44kD
Cell Pathway	Microsome . Endoplasmic reticulum .
Tissue Specificity	Expressed in kidney, placenta, pancreas, prostate, ovary, small intestine and colon, and in lower levels in the spleen and testis (PubMed:7859916). At midgestation, expressed at high levels in placenta and in fetal kidney and, at much lower levels, in fetal lung and testis (PubMed:8530071).
Function	catalytic activity:An 11-beta-hydroxysteroid + NAD(+) = an 11-oxosteroid + NADH.,disease:Defects in HSD11B2 are the cause of apparent mineralocorticoid excess (AME) [MIM:218030]. AME is a potentially fatal disease characterized by severe juvenile low-renin hypertension, sodium retention, hypokalemia and low levels of aldosterone. It often leads to nephrocalcinosis.,enzyme regulation:Inhibited by glycyrrhetic acid (derived



from liquorice), carbenoxone and 11-alpha-OH-progesterone.,
function: Catalyzes the conversion of cortisol to the inactive metabolite cortisone. Modulates intracellular glucocorticoid levels, thus protecting the nonselective mineralocorticoid receptor from occupation by glucocorticoids.,
miscellaneous: Consumption of large amounts of liquorice can lead to apparent mineralocorticoid excess and hypertension., similarity: Belongs to the short-chain dehydrogenases/reductases

Background

hydroxysteroid 11-beta dehydrogenase 2(HSD11B2) Homo sapiens 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 mine

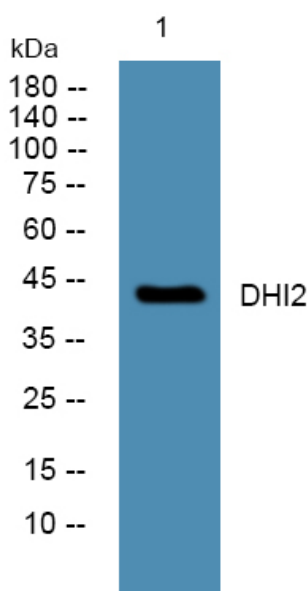
matters needing attention

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 lysates from PC12 cells,
primary antibody was diluted at 1:1000, 4° over night