10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HSD2 / HSD11B2 Antibody (aa25-40)

Rabbit Polyclonal Antibody
Catalog # ALS12149

Specification

HSD2 / HSD11B2 Antibody (aa25-40) - Product Information

Application	**IHC**
Primary Accession	P80365
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**44kDa KDa**

HSD2 / HSD11B2 Antibody (aa25-40) - Additional Information

Gene ID 3291

Other Names
Corticosteroid 11-beta-dehydrogenase isozyme 2, 1.1.1.-, 11-beta-hydroxysteroid dehydrogenase type 2, 11-DH2, 11-beta-HSD2, 11-beta-hydroxysteroid dehydrogenase type II, -HSD11 type II, NAD-dependent 11-beta-hydroxysteroid dehydrogenase, 11-beta-HSD, HSD11B2, HSD11K

Target/Specificity
Recognizes human, mouse and rat 11 beta-HSD2. Other species have not been tested.

Reconstitution & Storage
Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions
HSD2 / HSD11B2 Antibody (aa25-40) is for research use only and not for use in diagnostic or therapeutic procedures.

HSD2 / HSD11B2 Antibody (aa25-40) - Protein Information

Name HSD11B2 (HGNC:5209)

Function
Catalyzes the conversion of biologically active 11beta- hydroxyglucocorticoids (11beta-hydroxysteroid) such as cortisol, to inactive 11-ketoglucocorticoids (11-oxosteroid) such as cortisone, in the presence of NAD(+) (PubMed:7859916, PubMed:8538347, PubMed:10497248, PubMed:22796344, PubMed:27927697, PubMed:30902677, PubMed:33387577, PubMed:12788846, PubMed:<a

href="http://www.uniprot.org/citations/17314322" target="_blank">17314322). Functions as a dehydrogenase (oxidase), thereby decreasing the concentration of active glucocorticoids, thus protecting the nonselective mineralocorticoid receptor from occupation by glucocorticoids (PubMed:7859916, PubMed:10497248, PubMed:33387577, PubMed:12788846, PubMed:17314322). Plays an important role in maintaining glucocorticoids balance during preimplantation and protects the fetus from excessive maternal corticosterone exposure (By similarity). Catalyzes the oxidation of 11beta-hydroxytestosterone (11beta,17beta-dihydroxyandrost-4-ene-3-one) to 11-ketotestosterone (17beta-hydroxyandrost-4-ene-3,11-dione), a major bioactive androgen (PubMed:22796344, PubMed:27927697). Catalyzes the conversion of 11beta-hydroxyandrostenedione (11beta-hydroxyandrost-4-ene-3,17-dione) to 11-ketoandrostenedione (androst-4-ene-3,11,17- trione), which can be further metabolized to 11-ketotestosterone (PubMed:27927697). Converts 7-beta-25-dihydroxycholesterol to 7-oxo-25- hydroxycholesterol in vitro (PubMed:30902677). 7-beta-25-dihydroxycholesterol (not 7-oxo-25-hydroxycholesterol) acts as a ligand for the G-protein-coupled receptor (GPCR) Epstein-Barr virus-induced gene 2 (EBI2) and may thereby regulate immune cell migration (PubMed:30902677). May protect ovulating oocytes and fertilizing spermatozoa from the adverse effects of cortisol (By similarity).

Cellular Location
Microsome. Endoplasmic reticulum

Tissue Location
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).

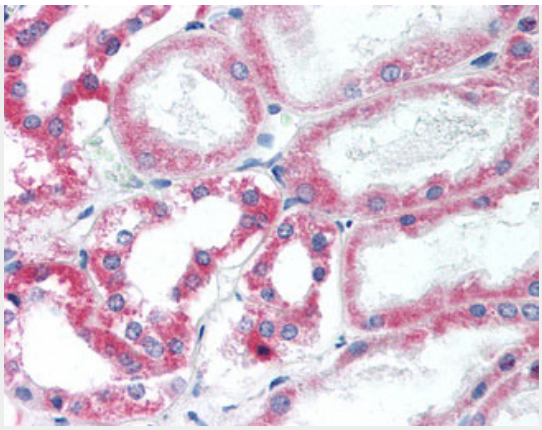
HSD2 / HSD11B2 Antibody (aa25-40) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HSD2 / HSD11B2 Antibody (aa25-40) - Images

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Anti-HSD11B2 antibody IHC of human kidney.

HSD2 / HSD11B2 Antibody (aa25-40) - Background

Catalyzes the conversion of cortisol to the inactive metabolite cortisone. Modulates intracellular glucocorticoid levels, thus protecting the nonselective mineralocorticoid receptor from occupation by glucocorticoids.

HSD2 / HSD11B2 Antibody (aa25-40) - References

Albiston A.L.,et al.Mol. Cell. Endocrinol. 105:R11-R17(1994).
Agarwal A.K.,et al.Genomics 29:195-199(1995).
Brown R.W.,et al.Biochem. J. 313:1007-1017(1996).
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