

**HSD2 / HSD11B2 Antibody (aa25-40)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS12149****Specification**

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

Application	IHC
Primary Accession	<a href="#">P80365</a>
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:<a href="http://www.uniprot.org/citations/10497248" target="\_blank">10497248</a>, PubMed:<a href="http://www.uniprot.org/citations/12788846" target="\_blank">12788846</a>, PubMed:<a href="http://www.uniprot.org/citations/17314322" target="\_blank">17314322</a>, PubMed:<a href="http://www.uniprot.org/citations/22796344" target="\_blank">22796344</a>, PubMed:<a href="http://www.uniprot.org/citations/27927697" target="\_blank">27927697</a>, PubMed:<a href="http://www.uniprot.org/citations/30902677" target="\_blank">30902677</a>, PubMed:<a href="http://www.uniprot.org/citations/33387577" target="\_blank">33387577</a>, PubMed:<a href="http://www.uniprot.org/citations/7859916" target="\_blank">7859916</a>, PubMed:<a

href="http://www.uniprot.org/citations/8538347" target="\_blank">8538347</a>). Functions as a dehydrogenase (oxidase), thereby decreasing the concentration of active glucocorticoids, thus protecting the nonselective mineralocorticoid receptor from occupation by glucocorticoids (PubMed:<a href="http://www.uniprot.org/citations/10497248" target="\_blank">10497248</a>, PubMed:<a href="http://www.uniprot.org/citations/12788846" target="\_blank">12788846</a>, PubMed:<a href="http://www.uniprot.org/citations/17314322" target="\_blank">17314322</a>, PubMed:<a href="http://www.uniprot.org/citations/33387577" target="\_blank">33387577</a>, PubMed:<a href="http://www.uniprot.org/citations/7859916" target="\_blank">7859916</a>). 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:<a href="http://www.uniprot.org/citations/22796344" target="\_blank">22796344</a>, PubMed:<a href="http://www.uniprot.org/citations/27927697" target="\_blank">27927697</a>). 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:<a href="http://www.uniprot.org/citations/27927697" target="\_blank">27927697</a>). Converts 7-beta-25-dihydroxycholesterol to 7-oxo-25-hydroxycholesterol in vitro (PubMed:<a href="http://www.uniprot.org/citations/30902677" target="\_blank">30902677</a>). 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:<a href="http://www.uniprot.org/citations/30902677" target="\_blank">30902677</a>). 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).

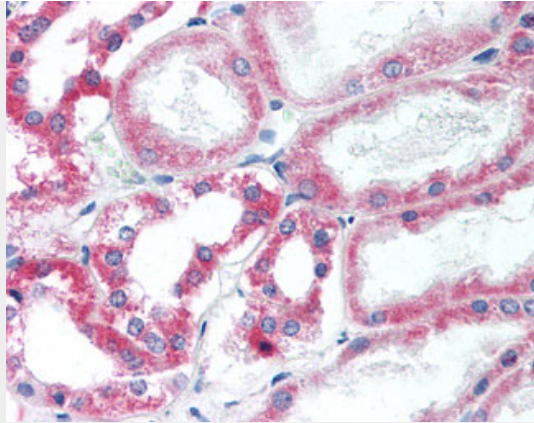
### HSD2 / HSD11B2 Antibody (aa25-40) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### HSD2 / HSD11B2 Antibody (aa25-40) - Images





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).
- Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
- Brown R.W.,et al.Biochem. J. 313:997-1005(1996).