**BACKGROUND**

Glucocorticoid hormone action in target tissues is modulated by 11β-hydroxysteroid dehydrogenase (11β-HSD), which catalyzes the interconversion of hormonally active C11-hydroxylated corticosteroids (cortisol, corticosterone) and their inactive C11-keto metabolites (cortisone, 11-dehydrocorticosterone). At least two isoforms of 11β-HSD exist: a low-affinity NADP-dependent dehydrogenase/oxidoreductase (11β-HSD1) and a high-affinity NAD-dependent dehydrogenase (11β-HSD2). The glycosylated 11β-HSD1 protein activates cortisol from cortisone, which is widely expressed in mammals, and is most highly expressed in the liver. 11β-HSD2 inactivates cortisol to cortisone and is expressed in placenta, aldosterone target tissues (kidney, parotid, colon and skin) and pancreas. 11β-HSD1 may play a role in glucose homeostasis and pathogenesis of a number of disorders including insulin resistance and obesity. 11β-HSD2 plays a crucial role in modulating mineralocorticoid and glucocorticoid receptor occupancy by glucocorticoids.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: HSD11B2 (human) mapping to 16q22.

**SOURCE**

11β-HSD2 (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of 11β-HSD2 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Blocking peptide available for competition studies, sc-19262 P (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

11β-HSD2 (T-12) is recommended for detection of 11β-hydroxysteroid dehydrogenase type 2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for 11β-HSD2 siRNA (h): sc-41379, 11β-HSD2 shRNA Plasmid (h): sc-41379-SH and 11β-HSD2 shRNA (h) Lentiviral Particles: sc-41379-V.

Molecular Weight of 11β-HSD2: 40 kDa.

Positive Controls: 11β-HSD2 (h3): 293T Lysate: sc-110103, HeLa whole cell lysate: sc-2200 or HCT 116 cell lysate.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cuz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cuz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2033 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**DATA**

![Image of Western Blot Analysis](https://www.scbt.com/Image/350x244 to 379x302)

**SELECT PRODUCT CITATIONS**


**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.