**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/oxoreductase (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 associates with differentiation or maturation in human colonic epithelia and may serve as a marker in development and disease. In addition, 11β-HSD2 plays a crucial role in modulating mineralcorticoid and glucocorticoid receptor occupancy by glucocorticoids.

**CHROMOSOMAL LOCATION**

Genetic locus: HSD11B2 (human) mapping to 16q22.1; Hsd11b2 (mouse) and human origin by Western Blotting (starting dilution 1:200, dilution range 1:200-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein and their inactive C11-ketometabolites (cortisone, 11-dehydrocorticosterone). At least two isoforms of 11β-HSD exist: a low-affinity NADP-dependent dehydrogenase/oxoreductase (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 associates with differentiation or maturation in human colonic epithelia and may serve as a marker in development and disease. In addition, 11β-HSD2 plays a crucial role in modulating mineralcorticoid and glucocorticoid receptor occupancy by glucocorticoids.

**SOURCE**

11β-HSD2 (H-145) is a rabbit polyclonal antibody raised against amino acids 261-405 mapping at the C-terminus 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.

**APPLICATIONS**

11β-HSD2 (H-145) is recommended for detection of 11β-HSD2 of mouse, rat and 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 1:50-1:1500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:1500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of 11β-HSD2: 40 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, JAR cell lysate: sc-2276 or 11β-HSD2 (h2): 293T Lysate: sc-116955.

**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.

**DATA**

11β-HSD2 (H-145): sc-20176. Western blot analysis of 11β-HSD2 expression in non-transfected 293T. sc-117752 (A) human 11β-HSD2 transfected 293T. sc-116955 (B) and HeLa (C) whole cell lysates.


**SELECT PRODUCT CITATIONS**


**MONOS Satisfaction Guaranteed**

Try 11β-HSD2 (C-9): sc-365529, our highly recommended monoclonal alternative to 11β-HSD2 (H-145).