

#### DESCRIPTION

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human/Mouse/Rat                                                                                  |
| <b>Specificity</b>                                                                                                                                                                                      | Detects endogenous human, mouse and rat 11 $\beta$ -HSD1 in Western blots.                       |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Goat IgG                                                                              |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                                        |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human 11 $\beta$ -HSD1<br>Asn24-Lys292<br>Accession # P28845 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm                  |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                                     |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                                  |

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### BACKGROUND

Hydroxysteroid (11-beta) Dehydrogenase, type I 11-beta-hydroxysteroid dehydrogenase 1 (11 $\beta$ -HSD1, HSD11B1 or HSD1) is a microsomal glycoprotein enzyme, with an apparent mass of 36 kDa, that catalyzes the conversion of the stress hormone cortisol to the inactive metabolite cortisone. 11 $\beta$ -HSD1 can also catalyze the reverse reaction, the conversion of cortisone to cortisol. 11 $\beta$ -HSD1 has been detected in a wide range of rat and human tissues, including lung and testis, but highest amounts are expressed in the liver. Human 11 $\beta$ -HSD1 shares 79 and 77% sequence identity with mouse and rat 11 $\beta$ -HSD1, respectively. There are at least 2 isoforms of 11 $\beta$ -HSD. The other isoform, type II, is expressed predominantly in the kidney and placenta and catalyzes only the 11-beta-dehydrogenation reaction. High levels of cortisol can lead to visceral obesity and particular defects in the expression or function of 11 $\beta$ -HSD1 have also been associated with insulin resistance and cognitive function.

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