

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects endogenous human, mouse and rat 11 β -HSD1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human 11 β -HSD1 Asn24-Lys292 Accession # P28845
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	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

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	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 β -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 β -HSD1 can also catalyze the reverse reaction, the conversion of cortisone to cortisol. 11 β -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 β -HSD1 shares 79 and 77% sequence identity with mouse and rat 11 β -HSD1, respectively. There are at least 2 isoforms of 11 β -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 β -HSD1 have also been associated with insulin resistance and cognitive function.

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