

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
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	0.5 μ g/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.