Human/Mouse/Rat 11β-HSD1 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF3397

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects endogenous human, mouse and rat 11β-HSD1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human 11β-HSD1 Asn24-Lys292 Accession # P28845
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

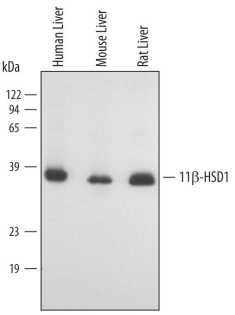
APPLICATIONS

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 µg/mL	See Below

DATA

Western Blot



Detection of Human/Mouse/Rat 11β-HSD1 by Western Blot. Western blot shows lysates of human, mouse and rat liver tissue. PVDF membrane was probed with 0.5 µg/mL of Human/Mouse/Rat 11β-HSD1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3397) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for 11β-HSD1 at approximately 36 kDa (as indicated). This experiment was conducted using Immunoblot Buffer Group 2.

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.** ● 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

Hydoxysteroid (11-beta) Dehydrogenase, type I 11-beta-hydroxysteroid dehydrogenase 1(11β-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. 11β-HSD1 can also catalyze the reverse reaction, the conversion of cortisone to cortisol. 11β-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 11β-HSD1 shares 79 and 77% sequence identity with mouse and rat 11β-HSD1, respectively. There are at least 2 isoforms of 11β-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 11β-HSD1 have also been associated with insulin resistance and cognitive function.

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