

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human 11 β -HSD2 in direct ELISA and Western Blots.
Source	Monoclonal Mouse IgG _{2A} Clone # 921215
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human 11 β -HSD2 Met105-Arg405 Accession # P80365
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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.
Immunohistochemistry	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

The human enzyme HSD-2/11 beta-HSD2 is encoded by the HSD11B2 gene and codes for a 405 aa protein, with high expression in kidney, colon, pancreas and placenta¹. HSD-2 modulates intracellular glucocorticoid levels by catalyzing the conversion of cortisol to the inactive metabolite cortisone². HSD-2 is abundantly expressed in human placenta and controls fetal glucocorticoid levels to protect the fetus from glucocorticoid exposure. Similarly, HSD-2 expression in the distal nephron protects mineralocorticoid receptors from glucocorticoids and helps regulate blood pressure³. Exposure to major environmental pollutant like Cadmium, inhibits activity of HSD-2 which affects the synthesis of glucocorticoids in placenta and thus contribute to developing preeclamptic conditions.

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