

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 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.