Progesterone (11P14): sc-53423

BACKGROUND

Progesterone is a C-21 steroid hormone that belongs to a class of hormones called progestogens; it is the major naturally occurring human progestogen. Progesterone functions in the female menstrual cycle, pregnancy and embryogenesis, and is produced in the adrenal glands, gonads, brain and, during pregnancy, in the placenta. Like other steroid hormones, Progesterone is synthesized from a derivative of cholesterol called pregnenolone. The Progesterone receptor a membrane-bound member of the steroid receptor superfamily, mediates the physiologic effects of Progesterone. The Progesterone receptor gene (PGR) uses separate promoters and translational start sites to produce two almost identical isoforms, PRA and PRB, which are distinct transcription factors that mediate their own response genes and physiologic effects with little overlap. They are composed of a modulating N-terminal domain, a DNA binding domain and a C-terminal steroid binding domain.

REFERENCES


SOURCE

Progesterone (11P14) is a mouse monoclonal antibody raised against 11α-Hydroxyprogesterone conjugated to BSA.

PRODUCT

Each vial contains 200 μg IgG κ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Progesterone (11P14) is available conjugated to agarose (sc-53423 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53423 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53423 PE), fluorescein (sc-53423 FITC), Alexa Fluor® 488 (sc-53423 AF488), Alexa Fluor® 546 (sc-53423 AF546), Alexa Fluor® 594 (sc-53423 AF594) or Alexa Fluor® 647 (sc-53423 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53423 AF680) or Alexa Fluor® 790 (sc-53423 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Progesterone (11P14) is recommended for detection of Progesterone of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Progesterone: 99 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG BSA-HRP, sc-516102-CM (dilution range: 1:1000-1:10000). 2) Immunoprecipitation: use Protein A/G PLUS-Agarose.

DATA

![Data Image]

SELECT PRODUCT CITATIONS


STORAGE

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.