**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 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 IgG₂b 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/IP 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/IP 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-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminal Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

**DATA**

![Progesterone (11P14): sc-53423. Western blot analysis of control BSA (A) and Progesterone-BSA conjugate (B).](image-url)

**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.