



# 17- $\beta$ Estradiol (ESTR-1): sc-51744

## BACKGROUND

17- $\beta$  Estradiol is a potent mammalian estrogenic hormone that is produced in the ovaries (by the granulosa cells), in the placenta, testis and possibly the adrenal cortex. The hormone is synthesized enzymatically from acetate, cholesterol, progesterone and testosterone. In addition to anatomic and physiological regulation of reproduction and secondary sex characteristics, it also influences activities such as bone growth, brain development and maturation and the intracellular concentrations of calcium and certain second messenger molecules. Research demonstrates salutary effects of 17- $\beta$  Estradiol following trauma-hemorrhage on different cell types. 17- $\beta$  Estradiol also induces improved circulation through relaxation of the aorta and has an anti-apoptotic effect on endothelial cells. 17- $\beta$  Estradiol is also implicated in the attenuation of H<sub>2</sub>O<sub>2</sub>-induced apoptosis via ER-dependent activation of caspase-9 and -3 in rat endothelial cells through mitochondria.

## REFERENCES

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## STORAGE

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

## SOURCE

17- $\beta$  Estradiol (ESTR-1) is a mouse monoclonal antibody raised against 17- $\beta$  Estradiol conjugated to BSA.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

17- $\beta$  Estradiol (ESTR-1) is recommended for detection of 17- $\beta$  Estradiol-BSA conjugate and free estradiol of mouse, rat and human origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

## RESEARCH USE

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

## PROTOCOLS

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