

Oxytocin-R (H-60): sc-33209

BACKGROUND

Oxytocin (OXT) is a pituitary hormone that has long been associated with uterine contraction during parturition and with milk ejection during nursing. Studies have suggested that Oxytocin is also a neurotransmitter with reproductively important effects. The receptor for Oxytocin (Oxytocin-R) is an integral membrane protein that is a member of the G protein-coupled receptor family. Uterine and cervical Oxytocin receptors are significantly upregulated during gestation, via both endocrine and mechanical signals, suggesting that Oxytocin receptors may be involved in parturition. Inhibition of Oxytocin receptor synthesis by IFN- τ and IFN- α may be a mechanism for Oxytocin receptor suppression during early pregnancy.

REFERENCES

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- Rozen, F., et al. 1995. Structure, characterization and expression of the rat Oxytocin receptor gene. *Proc. Natl Acad. Sci. USA* 92: 200-204.
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- Kimura, T., et al. 1996. Expression of Oxytocin receptor in human pregnant myometrium. *Endocrinology* 137: 780-785.
- Maggi, M., et al. 1996. Interferon- α downregulates expression of the Oxytocin receptor in cultured human myometrial cells. *Am. J. Physiol.* 271: E840-846.
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- Ou, C.W., et al. 1998. Increased expression of the rat myometrial Oxytocin receptor messenger ribonucleic acid during labor requires both mechanical and hormonal signals. *Biol. Reprod.* 59: 1055-1061.
- Umscheid, C.A., et al. 1998. Up-regulation of Oxytocin receptor messenger ribonucleic acid and protein by estradiol in the cervix of ovariectomized rat. *Biol. Reprod.* 59: 1131-1138.

CHROMOSOMAL LOCATION

Genetic locus: OXTR (human) mapping to 3p25.3; Oxt (mouse) mapping to 6 E3.

SOURCE

Oxytocin-R (H-60) is a rabbit polyclonal antibody raised against amino acids 330-389 mapping at the C-terminus of Oxytocin-R of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

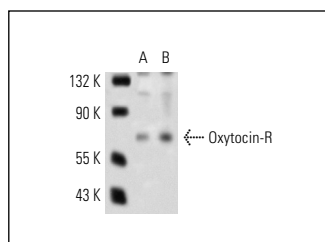
Oxytocin-R (H-60) is recommended for detection of Oxytocin-R of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Oxytocin-R siRNA (h): sc-40154, Oxytocin-R siRNA (m): sc-40155, Oxytocin-R shRNA Plasmid (h): sc-40154-SH, Oxytocin-R shRNA Plasmid (m): sc-40155-SH, Oxytocin-R shRNA (h) Lentiviral Particles: sc-40154-V and Oxytocin-R shRNA (m) Lentiviral Particles: sc-40155-V.

Molecular Weight of Oxytocin-R: 66 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or MCF7 whole cell lysate: sc-2206.

DATA



Oxytocin-R (H-60): sc-33209. Western blot analysis of Oxytocin-R expression in HeLa (A) and MCF7 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Mechsner, S., et al. 2005. Oxytocin receptor expression in smooth muscle cells of peritoneal endometriotic lesions and ovarian endometriotic cysts. *Fertil. Steril.* 83: 1220-1231.
- Yoshida, M., et al. 2009. Evidence that Oxytocin exerts anxiolytic effects via Oxytocin receptor expressed in serotonergic neurons in mice. *J. Neurosci.* 29: 2259-2271.
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RESEARCH USE

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

PROTOCOLS

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