**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. Oxytocin-R (OTR) is the receptor for oxytocin and is an integral membrane protein that is a member of the G protein-coupled receptor family. Uterine and cervical oxytocin receptors are significantly up-regulated during gestation, via both endocrine and mechanical signals, suggesting that Oxytocin-R may be involved in parturition. Inhibition of Oxytocin-R synthesis by IFN-α and IFN-γ may be a mechanism for Oxytocin-R suppression during early pregnancy.

**REFERENCES**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

Oxytocin-R (C-4) is a mouse monoclonal antibody raised against amino acids 330-389 mapping at the C-terminus of Oxytocin-R of human origin.

**PRODUCT**

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

Oxytocin-R (C-4) is available conjugated to agarose (sc-515809 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515809 HRP), 200 µg/ml, for WB, (HCP) and ELISA; to either phycoerythrin (sc-515809 PE), fluorescein (sc-515809 FITC), Alexa Fluor® 488 (sc-515809 AF488), Alexa Fluor® 546 (sc-515809 AF546), Alexa Fluor® 594 (sc-515809 AF594) or Alexa Fluor® 647 (sc-515809 AF647), 200 µg/ml, for WB (RGB), IF, IHC/IP and FCM; and to either Alexa Fluor® 680 (sc-515809 AF680) or Alexa Fluor® 790 (sc-515809 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

Oxytocin-R (C-4) is recommended for detection of Oxytocin-R of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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: 86 kDa.

Positive Controls: human Oxytocin-R transfected HEK293T whole cell lysate.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG® BP-HRP: sc-516102 or m-IgG® BP-FITC: sc-516140 or m-IgG® BP-PE: sc-516142 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG® BP-FITC: sc-516140 or m-IgG® BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Blocking Reagent: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

Oxytocin-R (C-4) sc-515809: Western blot analysis of Oxytocin-R expression in non-transfected A and human Oxytocin-R transfected B HEK293T whole cell lysates.

Oxytocin-R (C-4) sc-515809: Western blot analysis of Oxytocin-R expression in non-transfected A and human Oxytocin-R transfected B HEK293T whole cell lysates.

**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.