Oxytocin Receptor (OTR, OT-R, OTR1, OXTR)

Catalog number

O8251-04B

Supplier

United States Biological

The oxytocin receptor, also known as OXTR, is a protein which functions as receptor for the hormone and neurotransmitter oxytocin. Oxytocin receptors are expressed by the myoepithelial cells of the mammary gland, and in both the myometrium and endometrium of the uterus at the end of pregnancy. The oxytocin-oxytocin receptor system plays an important role as an inducer of uterine contractions during parturition and of milk ejection. Oxytocin receptors are also present in the central nervous system. These receptors modulate a variety of behaviors, including stress and anxiety, social memory and recognition, sexual and aggressive behaviors, bonding (affiliation) and maternal behavior. In some mammals, oxytocin receptors are also found in the kidney and heart.

Applications

Suitable for use in ELISA. Other applications not tested.

Recommended Dilution

ELISA: 1:64,000
Optimal dilutions to be determined by the researcher.

Storage and Stability

May be stored at 4°C for short-term only. Aliquot to avoid repeated freezing and thawing. Store at -20°C. Aliquots are stable for at least 12 months. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.

Immunogen

Syntehtic peptide corresponding to the internal region, C-LRTTRQKHSRL, of human OXTR (NP_000907.2)

Formulation

Supplied as a liquid in Tris-saline, pH 7.2. 0.5% BSA, 0.02% sodium azide.

Purity

Purified by immunoaffinity chromatography.

Specificity

Recognizes human OXTR. Species Crossreactivity: canine, mouse and rat.

Product Type

Pab

Source

human

Isotype

IgG

Grade

Affinity Purified

Applications

E

Crossreactivity

Ca Hu Mo Rt

Storage

4°C (-20°C Glycerol)

Reference

1. Windle, R.J., et al., Endocrinology 147: 2423-2431 (2006).