10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

OXTR Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21446b

Product Information

Application	WB, E
Primary Accession	P30559
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB52104
Calculated MW	42772

Additional Information

Gene ID	5021
Other Names	Oxytocin receptor, OT-R, OXTR
Target/Specificity	This OXTR antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 348-380 amino acids from the C-terminal region of human OXTR.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	OXTR Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	OXTR {ECO:0000303|PubMed:20647384, ECO:0000312|HGNC:HGNC:8529}
Function	G protein-coupled receptor for oxytocin (OXT), a neuropeptide hormone released by the posterior pituitary gland that plays a key role in social behavior and other biological processes, such as milk ejection (PubMed:11923477, PubMed:22069312, PubMed:32832646, PubMed:35104164, PubMed:35241813, PubMed:35851571). Ligand binding causes a conformation change that triggers signaling via guanine

nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors, such as phospholipase C (PubMed:22069312, PubMed:32832646, PubMed:35104164, PubMed:35241813, PubMed:35851571). OXTR is mainly coupled to G(q) G proteins and mediates production of diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) second messengers that modulate the activity of phosphatidylinositol 3-kinase and promote the release of Ca(2+) ions from intracellular stores, respectively (PubMed:11923477, PubMed:22069312, PubMed:32832646, PubMed:35104164, PubMed:35241813, PubMed:35851571). In presence of high levels of oxytocin, also coupled to G(i) G proteins, mediating inhibition of adenylate cyclase activity (PubMed:22069312, PubMed:35241813, PubMed:35851571). Central release of oxytocin plays essential roles in social behavior, such as maternal care, social cognition and affiliative behaviors, triggering signaling that modulates neural circuits by altering ion channel activity, changing intrinsic neuronal properties and modifying synaptic transmission (both excitatory and inhibitory) (PubMed:19934046, PubMed:20647384, PubMed:21896752, PubMed:22123970, PubMed:24367110). Peripheral release of oxytocin (secretion into the bloodstream) promotes various processes, such as parturition, lactation or osteoblast differentiation (PubMed:6278592). OXTR-mediated signaling promotes milk ejection by triggering and strengthening contraction of the smooth muscle of mammary gland (By similarity).

Cellular Location Cell membrane; Multi-pass membrane protein

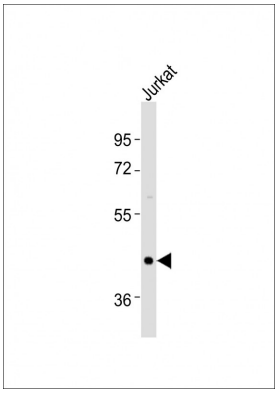
Background

Receptor for oxytocin. The activity of this receptor is mediated by G proteins which activate a phosphatidylinositol- calcium second messenger system.

References

Kimura T.,et al.Nature 356:526-529(1992).
Kimura T.,et al.Nature 357:176-176(1992).
Kopatz S.A.,et al.Submitted (SEP-2003) to the EMBL/GenBank/DDBJ databases.
Inoue T.,et al.J. Biol. Chem. 269:32451-32456(1994).

Images



Anti-OXTR Antibody (C-term)at 1:1000 dilution + Jurkat whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 43 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.