



---

<b>Catalog Number:</b>	RA24604	<b>Host:</b>	Rabbit
<b>Product Type:</b>	Whole Serum	<b>Species</b>	Rat
<b>Immunogen Sequence:</b>	Synthetic oxytocin coupled to bovine thyroglobulin (BTg) with carbodiimide (CDI) linker.	<b>Reactivity:</b>	
		<b>Format:</b>	Lyophilized. 100 ul with 0.09% sodium azide as a preservative.
<b>Applications:</b>	Immunohistochemistry:	1:5,000-1:10,000 (in PBS/0.3% Triton X-100 using Cy3 technique) 1:10,000-1:15,000 (in PBS/0.3% Triton X-100 using Bn/Av-HRP technique)	
	Dilutions listed as a recommendation. Optimal dilution should be determined by investigator.		
<b>Reconstitution:</b>	Do not reconstitute until ready to use since the product is most stable when lyophilized. The product does not need to be cooled during shipping. For long-term storage, store lyophilized antibody until ready to use at -15° C or lower. Reconstitute with 100 µL of distilled or deionized water.		
<b>Storage:</b>	Maintain at +2-8°C for 3 months or at -20°C for longer periods. Stable for 1 year. <i>Avoid repeated freeze-thaw cycles.</i>		

---

### Application Notes

#### Tissue Preparation:

10 µm or 50 µm

•Fixative: 4% paraformaldehyde in 0.1 M phosphate buffer, pH 7.4; 500 mL over ~20-30 min.

•Post Fixation: 1.5 hr. at 4°C in 4% paraformaldehyde in 0.1 M phosphate buffer, pH 7.4.

#### Immunofluorescence:

Oxytocin antiserum was quality control tested using standard immunohistochemical methods. The antiserum demonstrates significant labeling of rat hypothalamus using indirect immunofluorescent and biotin/avidin-HRP techniques. Staining is completely eliminated by pretreatment of 1 mL of the diluted antibody with 5 µg of Oxytocin. Pretreatment of 1 mL of the diluted antibody with as much as 100 µg of vasopressin does not diminish staining.

#### Description/Data:

Oxytocin is a mammalian hormone that acts primarily as a neuromodulator in the brain. The receptor is a G-protein-coupled receptor which requires Mg<sup>2+</sup> and cholesterol. It belongs to the rhodopsin-type (class I) group of G-protein-coupled receptors. Oxytocin receptors are expressed by neurons in many parts of the brain and spinal cord, including the amygdala, ventromedial hypothalamus, septum, nucleus accumbens and brainstem. It is involved in regulating mood including perceptions of stress and stress induced depression. Oxytocin may play a role in autism and may be an effective treatment for related repetitive and affiliative behaviors. It is also known to produce antinociception and analgesia making it a target for certain pain therapies.

### FOR RESEARCH USE ONLY

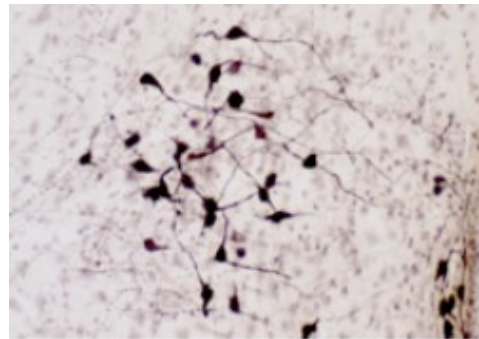
NEUROMICS' REAGENTS ARE FOR IN VITRO AND CERTAIN NON-HUMAN IN VIVO EXPERIMENTAL USE ONLY AND NOT INTENDED FOR USE IN ANY HUMAN CLINICAL INVESTIGATION, DIAGNOSIS, PROGNOSIS, OR TREATMENT. THE ABOVE ANALYSES ARE MERELY TYPICAL GUIDES. THEY ARE NOT TO BE CONSTRUED AS BEING SPECIFICATIONS. ALL OF THE ABOVE INFORMATION IS, TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. HOWEVER, SINCE THE CONDITIONS OF USE ARE BEYOND OUR CONTROL, ALL RECOMMENDATIONS OR SUGGESTIONS ARE MADE WITHOUT GUARANTEE, EXPRESS OR IMPLIED, ON OUR PART. WE DISCLAIM ALL LIABILITY IN CONNECTION WITH THE USE OF THE INFORMATION CONTAINED HEREIN OR OTHERWISE, AND ALL SUCH RISKS ARE ASSUMED BY THE USER. WE FURTHER EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. -V2/08/2012

---

[www.neuromics.com](http://www.neuromics.com)

Neuromics Antibodies • 5325 West 74<sup>th</sup> Street, Suite 8 • Edina, MN 55439  
phone 866-350-1500 • fax 612-677-3976 • e-mail: [pshuster@neuromics.com](mailto:pshuster@neuromics.com)

*Image: Oxytocin staining of Rat Hypothalamus (PVN/SON).  
Note: staining is completely eliminated by pretreatment of 1 mL of the diluted antibody with 5 µg of Oxytocin.  
Pretreatment of 1 mL of the diluted antibody with as much as 100 µg of vasopressin does not diminish staining.*



## ***FOR RESEARCH USE ONLY***

NEUROMICS' REAGENTS ARE FOR IN VITRO AND CERTAIN NON-HUMAN IN VIVO EXPERIMENTAL USE ONLY AND NOT INTENDED FOR USE IN ANY HUMAN CLINICAL INVESTIGATION, DIAGNOSIS, PROGNOSIS, OR TREATMENT. THE ABOVE ANALYSES ARE MERELY TYPICAL GUIDES. THEY ARE NOT TO BE CONSTRUED AS BEING SPECIFICATIONS. ALL OF THE ABOVE INFORMATION IS, TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. HOWEVER, SINCE THE CONDITIONS OF USE ARE BEYOND OUR CONTROL, ALL RECOMMENDATIONS OR SUGGESTIONS ARE MADE WITHOUT GUARANTEE, EXPRESS OR IMPLIED, ON OUR PART. WE DISCLAIM ALL LIABILITY IN CONNECTION WITH THE USE OF THE INFORMATION CONTAINED HEREIN OR OTHERWISE, AND ALL SUCH RISKS ARE ASSUMED BY THE USER. WE FURTHER EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.-V2/08/2012

---

**www.neuromics.com**

Neuromics Antibodies • 5325 West 74<sup>th</sup> Street, Suite 8 • Edina, MN 55439  
phone 866-350-1500 • fax 612-677-3976 • e-mail: [pshuster@neuromics.com](mailto:pshuster@neuromics.com)