

Datasheet: 8250-0495

**BATCH NUMBER 164285**

<b>Description:</b>	RAT ANTI SEROTONIN
<b>Specificity:</b>	SEROTONIN
<b>Other names:</b>	5-HT, 5-HYDROXYTRYPTAMINE
<b>Format:</b>	S/N
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	YC5/45
<b>Isotype:</b>	IgG2
<b>Quantity:</b>	0.1 ml

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Frozen (1)	▪			
Immunofluorescence	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using the appropriate negative/positive controls.

**(1)Formaldehyde fixation is recommended.**

### Target Species

Broad

### Species Cross Reactivity

Reacts with: Human, Rat, Goldfish, Cat, Chicken, Marine file snake, Helix aspersa, Hirudo medicinalis

**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

### Product Form

Tissue Culture Supernatant - liquid

### Preservative Stabilisers

0.05% Thiomersal

<b>Immunogen</b>	Serotonin conjugated to bovine serum albumin.
<b>RRID</b>	AB_2122542
<b>Fusion Partners</b>	Spleen cells from immunised COB wistar rats were fused with cells of the Y3-Ag-1.2.3 rat myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti serotonin antibody, clone YC5/45</b> recognizes serotonin and does not cross react with 5-hydroxyindolacetic acid, GABA, noradrenaline, 5-hydroxytryptophan, carnosine or melatonin.</p> <p>Serotonin, also known as 5-hydroxytryptamine or 5-HT is a biochemical messenger and neurotransmitter synthesized from L-tryptophan. Serotonin has a range of functions, including regulation of gastric motility, and may be related to some psychiatric disorders including schizophrenia and depression. Serotonin is widely distributed in the central and peripheral nervous system, and also in some non-neural tissues such as platelets.</p> <p>Serotonin appears widely conserved and Rat anti serotonin antibody, clone YC5/45 has been used successfully to demonstrate serotonin immunoreactivity using immunohistochemistry in many diverse groups including primates (<a href="#">Vanoli et al. 2013</a>), rodents (<a href="#">Hosoda et al. 1984</a>), prototherian mammals, avians and reptiles (<a href="#">Adamson and Campbell 1988</a>), teleosts (<a href="#">Takeda et al. 2014</a>) through to invertebrates including hirudinids (<a href="#">Masuda-Nakagawa et al. 1990</a>) and gastropods (<a href="#">Osborne and Dockray 1982</a>).</p>

**References**

1. Consolazione, A. *et al.* (1981) Immunocytochemical detection of serotonin with monoclonal antibodies. [J Histochem Cytochem. 29: 1425-30.](#)
2. Milstein, C. *et al.* (1983) The discrepancy between the cross-reactivity of a monoclonal antibody to serotonin and its immunohistochemical specificity. [Mol Immunol. 20 \(1\): 113-23.](#)
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4. La Rosa, S. *et al.* (2011) Histologic characterization and improved prognostic evaluation of 209 gastric neuroendocrine neoplasms. [Hum Pathol. 42: 1373-84.](#)
5. Takeda, A. *et al.* (2015) Axonal regeneration through the fibrous scar in lesioned goldfish spinal cord. [Neuroscience. 284: 134-52.](#)
6. Cuello, A.C. *et al.* (1982) Immunocytochemistry with internally labeled monoclonal antibodies. [Proc Natl Acad Sci U S A. 79: 665-9.](#)
7. Gil-Loyzaga, P. *et al.* (1997) Serotonergic innervation of the organ of Corti of the cat cochlea. [Neuroreport. 8: 3519-22.](#)
8. Osborne, N.N. (1982) Uptake, localization and release of serotonin in the chick retina. [J Physiol. 331: 469-79.](#)
9. Vanoli, A. *et al.* (2013) Histologic changes in type A chronic atrophic gastritis indicating increased risk of neuroendocrine tumor development: the predictive role of dysplastic and severely hyperplastic enterochromaffin-like cell lesions. [Hum Pathol. 44: 1827-37.](#)
10. Dainese, E. *et al.* (2013) Linear and micronodular neuroendocrine cell hyperplasia in an ovarian mucinous cystadenoma. [Pathol Res Pract. 209: 670-3.](#)
11. Solcia, E. *et al.* (1990) Gastric argyrophil carcinoidosis in patients with Zollinger-Ellison

syndrome due to type 1 multiple endocrine neoplasia. A newly recognized association. [Am J Surg Pathol. 14 \(6\): 503-13.](#)

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**Storage** This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10522 available at: <https://www.bio-rad-antibodies.com/SDS/8250-0495>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight®800</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>

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'M381947:210512'

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