

Datasheet: 8250-0495

BATCH NUMBER 159947

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

	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

Immunogen	Serotonin conjugated to bovine serum albumin.
RRID	AB_2122542
Fusion Partners	Spleen cells from immunised COB wistar rats were fused with cells of the Y3-Ag-1.2.3 rat myeloma cell line.

Specificity **Rat anti serotonin antibody, clone YC5/45** recognizes serotonin and does not cross react with 5-hydroxyindolacetic acid, GABA, noradrenaline, 5-hydroxytryptophan, carnosine or melatonin.

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.

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 ([Vanoli et al. 2013](#)), rodents ([Hosoda et al. 1984](#)), prototherian mammals, avians and reptiles ([Adamson and Campbell 1988](#)), teleosts ([Takeda et al. 2014](#)) through to invertebrates including hirudinids ([Masuda-Nakagawa et al. 1990](#)) and gastropods ([Osborne and Dockray 1982](#)).

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.](#)
3. Suárez-Quian, C.A. (1987) The distribution of four lysosomal integral membrane proteins (LIMPs) in rat basophilic leukemia cells. [Tissue Cell. 19: 495-504.](#)
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.](#)

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.

Guarantee 12 months from date of despatch

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

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550 , DyLight®650 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC

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