

Novocastra™ Lyophilized Rabbit Polyclonal Antibody Serotonin

Product Code: NCL-SEROTp

Intended Use	FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.
Specificity	Human serotonin (5-hydroxytryptamine, 5-HT).
Antigen Used for Immunizations	Serotonin/creatinine sulfate complex conjugated to bovine serum albumin.
Preparation	Lyophilized delipidized rabbit serum diluted in PBS with 1% BSA containing sodium azide. Reconstitute with the volume of sterile distilled water indicated on the vial label.
Effective on Frozen Tissue	Not evaluated.
Effective on Paraffin Wax Embedded Tissue	Yes.
Recommendations on Use	Immunohistochemistry on paraffin sections. Heat Induced Epitope Retrieval (HIER): Please follow the instructions for use in Novocastra Epitope Retrieval Solution pH 6. Suggested dilution: 1:500 for 30 minutes at 25 °C. This is provided as a guide and users should determine their own optimal working dilutions. Visualization: Please follow the instructions for use in the Novolink™ Polymer Detection Systems. For further product information or support, contact your local distributor or regional office of Leica Biosystems, or alternatively, visit the Leica Biosystems Web site, www.LeicaBiosystems.com <u>The performance of this antibody should be validated when utilized with other manual staining systems or automated platforms.</u>
Positive Controls	Immunohistochemistry: bowel.
Staining Pattern	Cytoplasmic.
Storage and Stability	Store unopened lyophilized antibody at 2-8 °C. Under these conditions, there is no significant loss in product performance up to the expiry date indicated on the vial label. The reconstituted antibody is stable for at least two months when stored at 2-8 °C. For long term storage, it is recommended that aliquots of the antibody are frozen at -20 °C (frost-free freezers are not recommended). Repeated freezing and thawing must be avoided. Prepare working dilutions on the day of use.
Warnings and Precautions	This reagent has been prepared from the supernatant of cell culture. As it is a biological product, reasonable care should be taken when handling it. This reagent contains sodium azide. A Material Safety Data Sheet is available upon request or available from www.LeicaBiosystems.com





B I O S Y S T E M S

General Overview

Serotonin (5-hydroxytryptamine, 5-HT) is a widely distributed neurotransmitter and hormone in the mammalian central nervous system (CNS) and periphery. Serotonin is formed by the decarboxylation of 5-hydroxy-tryptophan, its intermediate, which in turn is formed by hydroxylation of L-tryptophan by tryptophan hydroxylase. In the CNS, the action of 5-HT is terminated by reuptake into the presynaptic terminal by specific 5-HT transporters. The majority of serotonergic nerve terminals in the CNS originate in neuronal cell bodies of the raphe nuclei (dorsal, median), nucleus raphe obscurus and nucleus raphe pallidus in the brainstem which project to specific areas of the brain and spinal cord. 5-HT is thought to be an inhibitory neurotransmitter regulating a wide range of sensory, motor and cortical functions in the CNS. In the periphery, 5-HT is present in neural and non-neural structures such as platelets, gastrointestinal tract, (myenteric plexus, enterochromaffin cells), lungs (neuroepithelial cells), thyroid gland and spleen.

General References

Owens M J and Nemeroff C B. *Clinical Chemistry*. 40 (2): 288–295 (1994).
Millhorn D E, Hökfelt T, Seroogy K, et al.. *Brain Research*. 461: 169–174 (1988).
Lundqvist M and Wilander E. *Journal of Pathology*. 148: 141–147 (1986).