

# Novocastra™ Lyophilized Rabbit Polyclonal Antibody Serotonin

## Product Code: NCL-SEROTp

<b>Intended Use</b>	<b>For In Vitro Diagnostic Use:</b> This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
<b>Specificity</b>	Human serotonin (5-hydroxytryptamine, 5-HT).
<b>Antigen Used for Immunizations</b>	Serotonin/creatinine sulfate complex conjugated to bovine serum albumin.
<b>Preparation</b>	Lyophilized delipidized rabbit serum diluted in PBS with 1% BSA containing 15mM sodium azide. Reconstitute with 0.5 mL of sterile distilled water as indicated on vial label.
<b>Effective on Frozen Tissue</b>	Not evaluated.
<b>Effective on Paraffin Wax Embedded Tissue</b>	Yes
<b>Recommendations on Use</b>	Immunohistochemistry: Typical working dilution 1:100–1:200. 60 minutes primary antibody incubation at 25 °C. Standard ABC technique. Western Blotting: Not evaluated.
<b>Positive Controls</b>	Immunohistochemistry: Small intestine.
<b>Staining Pattern</b>	Cytoplasmic.
<b>Storage and Stability</b>	Store unopened lyophilized antibody at 4 °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 4 °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.
<b>General Overview</b>	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.
<b>General References</b>	Owens M J and Nemeroff C B. Clinical Chemistry. 40 (2): 288–295 (1994). Millhorn D E, Hökfelt T, Serougy K, et al.. Brain Research. 461: 169–174 (1988). Lundqvist M and Wilander E. Journal of Pathology. 148: 141–147 (1986).

