

Rabbit Anti-Serotonin Polyclonal: RC0101, RC0101RTU7

Intended Use: For Research Use Only

Description: Serotonin (5-hydroxytryptamine, or 5-HT) is a monoamine neurotransmitter synthesised in serotonergic neurons in the central nervous system and enterochromaffin cells in the gastrointestinal tract. Serotonin plays an important part in the biochemistry of depression, migraine, bipolar disorder and anxiety. It is also believed to be influential on sexuality and appetite. 5-HT is generally thought not to be released from synaptic terminal buttons in the manner of classical neurotransmission but from serotonergic varicosities into the extra neuronal space. From here it is free to diffuse over a relatively large region of space (>20µm) and activate 5-HT receptors located on the dendrites, cell bodies and presynaptic terminals of adjacent neurons. Serotonergic action is terminated primarily via uptake of 5-HT from the synapse. This is through the specific monoamine transporter for 5-HT, 5-HT reuptake transporter, on the presynaptic neuron. The pharmacology of 5-HT is extremely complex, with its actions being mediated by a large and diverse range of 5-HT receptors.

Specifications

Clone: Polyclonal
Source: Rabbit
Isotype: IgG
Reactivity: Human, rat
Localization: Cytoplasm, secreted
Formulation: Antiserum containing < 0.1% sodium azide (NaN₃)
Storage: Store at 2°- 8°C
Applications: IHC
Package:

Description	Catalog No.	Size
Serotonin Concentrated	RC0101	1 ml
Serotonin Prediluted	RC0101RTU7	7 ml

IHC Procedure*

Positive Control Tissue: Brain
Concentrated Dilution: 200-300
Pretreatment: Citrate pH6.0 or EDTA pH 8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp: 30 minutes @ 37°C
Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.

References:

1. Distribution of raphespinal fibers in the mouse spinal cord. Liang, H; et al. Molecular pain 11 42 2015.
2. Fos expression in monoaminergic cell groups in response to sociosexual interactions in male and female Japanese quail. Iyilikci, O; et al. Behavioral neuroscience 128 48-60 2014.
3. Role of serotonergic system in the pathogenesis of fibrosis in canine idiopathic inflammatory myopathies. Luigi Michele Pavone, et al. Neuromuscular disorders : NMD 22 2012.
4. Degranulation of mast cells due to compound 4880 induces concentration-dependent intestinal contraction in rainbow trout (*Oncorhynchus mykiss* Walbaum) ex vivo. Manera M, et al. Journal of experimental zoology. Part A, Ecological genetics and physiology 315 447-57 2011. Nuclear organization of cholinergic, putative catecholaminergic and serotonergic systems in the brains of two megachiropteran species. Dell, Leigh-Anne, et al. J. Chem. Neuroanat., 40: 177-95 (2010) 2010.
5. Organization of cholinergic, putative catecholaminergic and serotonergic nuclei in the diencephalon, midbrain and pons of sub-adult male giraffes. Bux F, et al. J Chem Neuroanat 39 189-203. Epub 2009 Oct 4. 2010.
6. Nuclear organization and morphology of cholinergic, putative catecholaminergic and serotonergic neurons in the brain of the rock hyrax, *Procavia capensis*. Nadine Gravett, et al. Journal of chemical neuroanatomy 38 2009.