

Serotonin antibody (5-HT rabbit polyclonal Ab)

Ref: IS1007

The anti-Serotonin antibody IS1007 is a rabbit polyclonal antibody with high affinity and specificity. Using with the STAINperfect immunostaining kit A, our antibody labeled directly 5-HT in whole mounts, cell culture and tissue sections.

Clonality	Polyclonal antibody
Host	Rabbit
Species reactivity	Reacts with all species
Tested samples	whole mounts, cell culture, tissue sections
Staining procedure	<u>STAINperfect immunostaining kit A</u>
Format	50µL (approx. 40 tissue sections)

Product information

Product overview

Product name	Serotonin antibody (5-HT rabbit polyclonal Ab)
Synonyms	Anti-5-HT antibody Anti-5-hydroxytryptamine antibody
Immunogen	Conjugated 5-HT
Specificity	When tested in competitive ELISA, the anti-conjugated Serotonin antibody did not show any significant cross reactivity with 5-Hydroxytryptamine analogs, including Tryptamine and 5-Methoxytryptamine.
Volume	50µL
Lot number	140201

Storage

Form	Liquid
Purity	Purified anti-serum
Storage buffer	Store at +4°C for short term (1-2 weeks). Aliquot and store at -20°C for long term. Avoid repeated freeze / thaw cycles.

Material safety datasheet

[Download MSDS](#)

Protocols

IF - Cell cultures, Whole mounts, Tissue sections

Dilute antibody with the antibody diluent provided in the [STAINperfect immunostaining kit A](#). Use at 1/250 -1/1000 dilution. Follow the STAINperfect protocol suited to your sample

Comments

Optimal working dilutions must be determined by the end-user

Restrictions

For research use only

Full protocol

[Download STAINperfect protocol for Serotonin staining](#)

Protocols-at-a-glance

[Complete Instructions for Use](#)

[Protocol-at-a-glance for cell cultures](#)

[Protocol-at-a-glance for whole mounts](#)

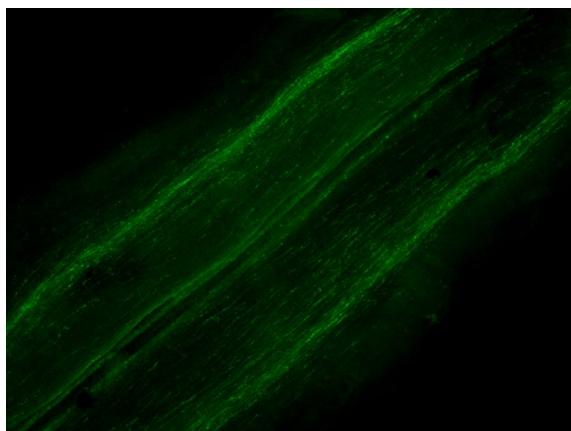
References

Antibody not yet cited. Submit an article and [get a 10% discount](#).

Selected papers about serotonin:

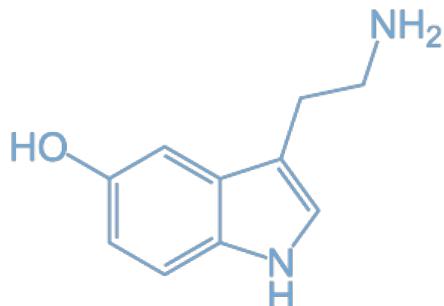
- [Gershon MD. 5-Hydroxytryptamine \(serotonin\) in the gastrointestinal tract. Curr Opin Endocrinol Diabetes Obes. 2013 Feb;20\(1\):14-20. doi: 10.1097/MED.0b013e32835bc703.](#)
- [Baganz NL, Blakely RD. A dialogue between the immune system and brain, spoken in the language of serotonin. ACS Chem Neurosci. 2012 Dec 7. doi: 10.1021/cn300186b. Epub 2012 Dec 7.](#)
- [Bortolato M et al. The role of the serotonergic system at the interface of aggression and suicide. Neuroscience. 2013 Apr 16;236:160-70. doi: 10.1016/j.neuroscience.2013.03.030.](#)
- [Kiyasova V et al. A genetically defined morphologically and functionally unique subset of 5-HT neurons in the mouse raphe nuclei. J Comp Neurol. 2011 Aug 23;31\(8\):2756-68. doi: 10.1002/cn.22750.](#)

Product pictures



5-HT fibers labeled in the spinal cord of mouse embryo (E15.5).

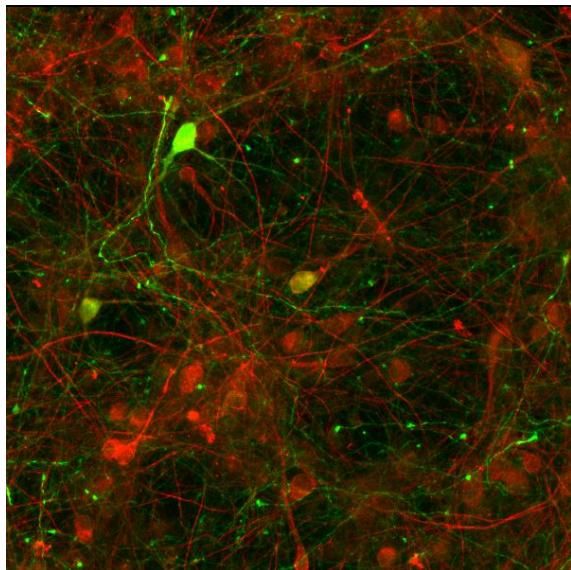
Optimized anti-Serotonin polyclonal antibody highlights the projections of serotoninergic neurons across the spinal cord of mouse embryo. Staining was performed using STAINperfect immunostaining kit A, following the protocol for whole mounts samples. Secondary antibody (goat anti-rabbit Alexa Fluor® 488) was used and picture was acquired by confocal imaging at low magnification.



Serotonin

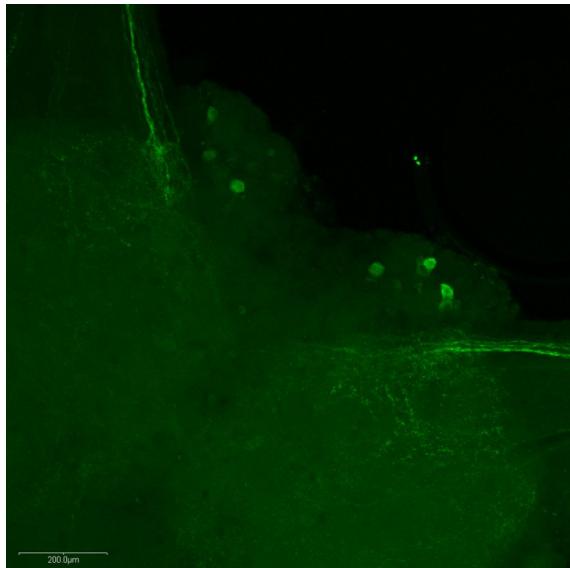
Serotonin - 5-hydroxytryptamine (5-HT)

Serotonin is a monoamine neurotransmitter derived from tryptophan metabolism. Either produced by gut cells or synthesized by serotonergic neurons in the brain, Serotonin is known to be involved in the regulation of appetite, mood, sleep, memory, aging, and to modulate both innate and adaptive immune responses.



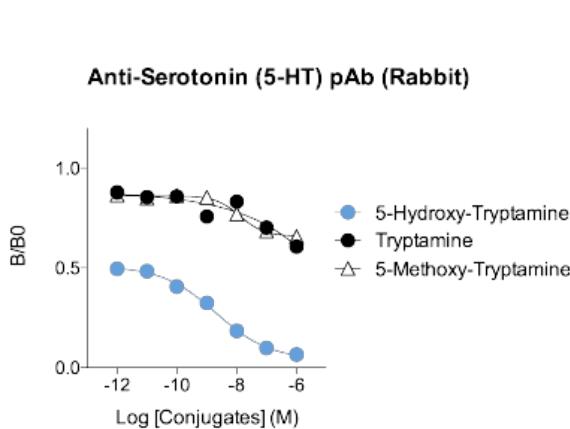
Staining of serotoninergic neurons in rat primary mesencephalic culture

Our optimized rabbit polyclonal anti-Serotonin antibody permits the detection of serotoninergic neurons in primary rat mesencephalic cell culture. Staining was performed using STAINperfect immunostaining kit A, according to the protocol optimized for cell culture and compatible with a MAP2 staining (red). Fluorescent labeled secondary antibody were used and picture was acquired by high-content imaging.



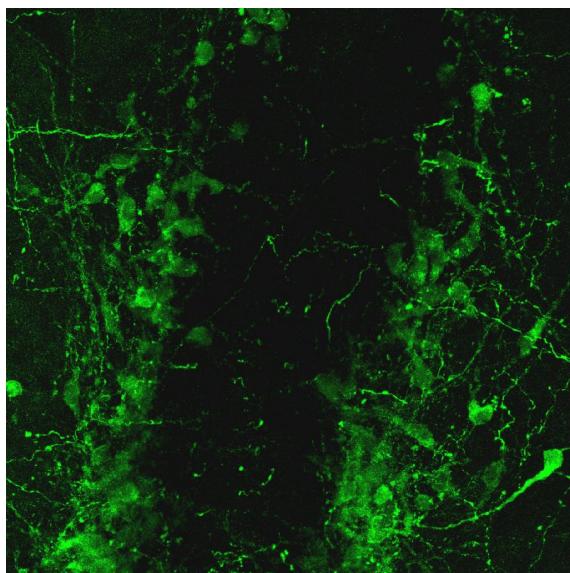
Soma and fibers of serotonergic neurons in crayfish brain

Detection of serotonergic neurones, soma and fibers in the crayfish brain using STAINperfect immunostaining kit A and according to the protocol for whole mount samples. Secondary antibody (goat anti-rabbit Alexa Fluor® 488) was used and picture was acquired by confocal imaging at low magnification.



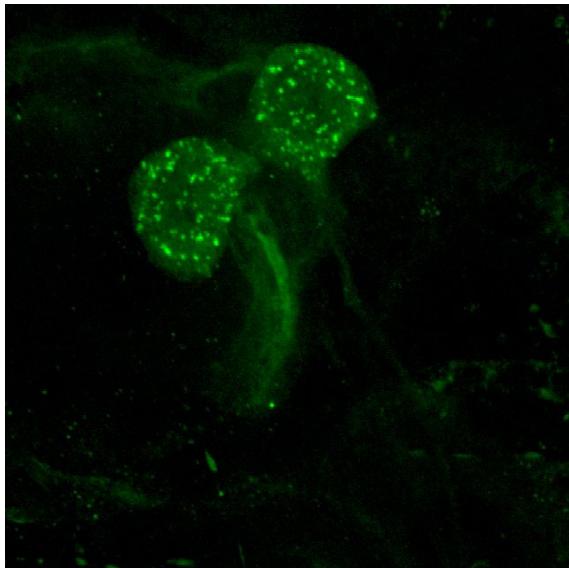
Affinity & specificity of anti-5-HT antibody

Competitive ELISA demonstrates that low amounts of Serotonin conjugate are required to abolish antigen-antibody reaction (high affinity), while rising concentrations of Tryptamine and 5-Methoxy-Tryptamine conjugates do not affect reaction (high specificity).



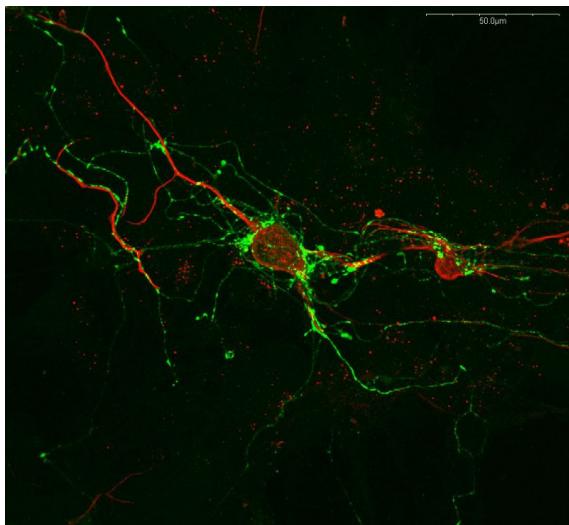
Serotonin imaging in embryonic mouse medulla

Using STAINperfect immunostaining kit A, the anti-Serotonin rabbit polyclonal antibody (Ref: IS1007) demonstrates the presence of serotonin in embryonic mouse medulla (E13.5). The staining was performed according to the protocol optimized for whole-mount samples and was revealed using Alexa Fluor® 488-conjugated secondary antibody.



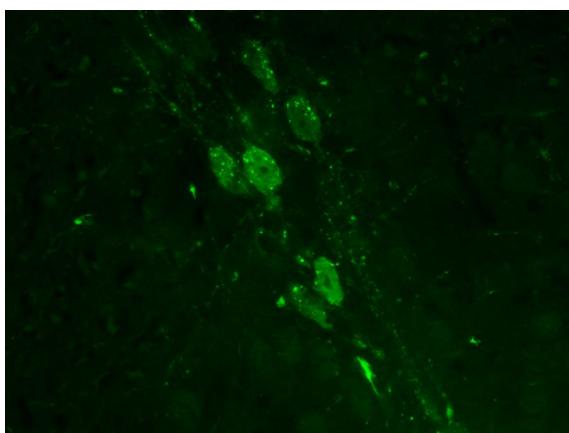
Presence of serotonin in neurons of crayfish brain

High magnification of serotoninergic neurons in the brain of a crayfish. This staining shows serotonin presence in soma containing vesicles and projections. Tissue was processed following whole mount protocol of STAINperfect immunostaining kit A. Fluorescent labeled secondary antibody was used and picture was acquired by confocal imaging.



Staining of serotoninergic neurons in mouse primary hindbrain culture

Anti-Serotonin (green) and MAP2 (red) antibodies permit the detection of serotoninergic neurons in primary mouse hindbrain cell culture. Staining was performed using STAINperfect immunostaining kit A, according to the protocol optimized for cell culture and compatible with a MAP2 staining. Fluorescent labeled secondary antibody were used and picture was acquired by high-content imaging.



Immunostaining of 5-HT-containing cells in adult mouse brain slice

Anti-Serotonin antibody highlights the soma of serotoninergic neurons in the pons of mouse adult brain sagittal section. Staining was performed with STAINperfect immunostaining kit A, following the protocol for tissue sections. Secondary antibody (goat anti-rabbit Alexa Fluor® 488) was used and picture was acquired by confocal imaging at high magnification.

Contact information

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To order, review, ask for technical support, visit product page at:

<https://www.immusmol.com/serotonin-antibody-5-ht-rabbit-polyclonal-pab-validated-icc-ihc-if.html>