

# Serotonin receptor

## 5HT<sub>1A</sub> polyclonal antibody

Serotonin (5-hydroxytryptamine, 5-HT) is a monoamine found in the central nervous system, gastrointestinal tract, and blood with broad physiological functions as a neurotransmitter, in gastric motility, hemostasis, and cardiovascular integrity. Seven subclasses (5-HT 1-7) of serotonin receptors have been identified, a majority of which are members of the seven transmembrane domain-containing G-protein coupled receptor (GPCR) family, and are the target of several anti-depressant drugs. The 5-HT<sub>1</sub> subclass consists of five highly homologous receptors that couple via G(i/o) alpha subunits to inhibit adenylyl cyclase activity. The 5-HT<sub>1A</sub> receptor gene is 99% homologous between human and mouse, and is expressed from an intronless gene with a predicted length of 421 amino acids. 5-HT<sub>1A</sub> receptor activation is generally inhibitory to cAMP production, but may also stimulate type II adenylyl cyclase activity in a cell-specific manner via release of G(beta/gamma) subunits when coupled to G(i2). 5-HT<sub>1A</sub> expression in mammals is strongest in CNS limbic pathways that control emotion, including tissue of the hippocampus, dorsal raphe, and septum.

This antibody is covered by our [Worry-Free Guarantee](#).

Citations: 4

[View Online »](#)

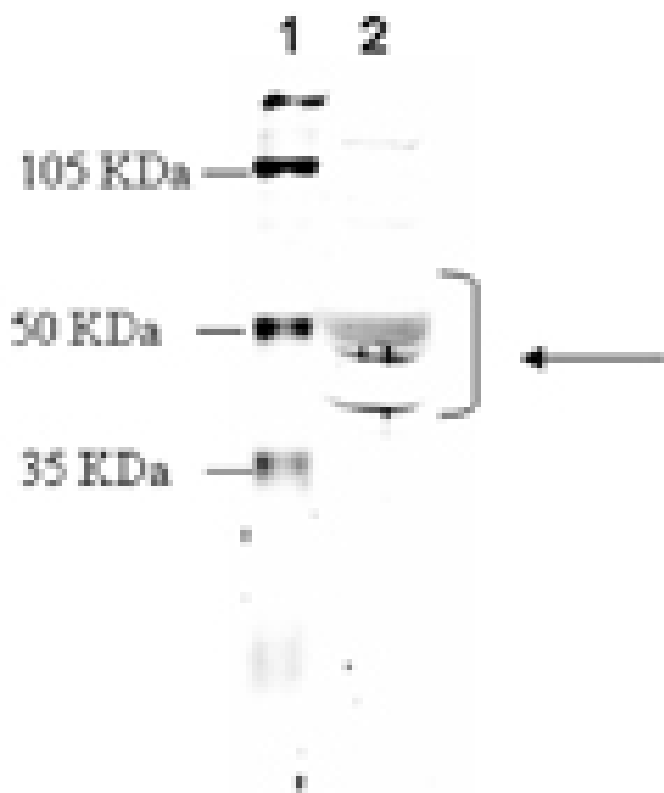
### Ordering Information

[Order Online »](#)

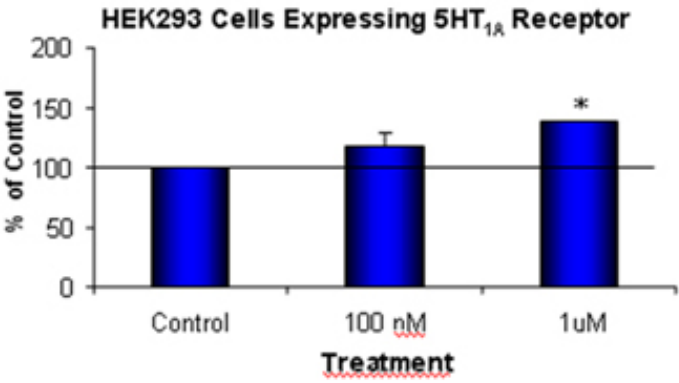
ADI-905-741-100	100µg
-----------------	-------

Manuals, SDS & CofA

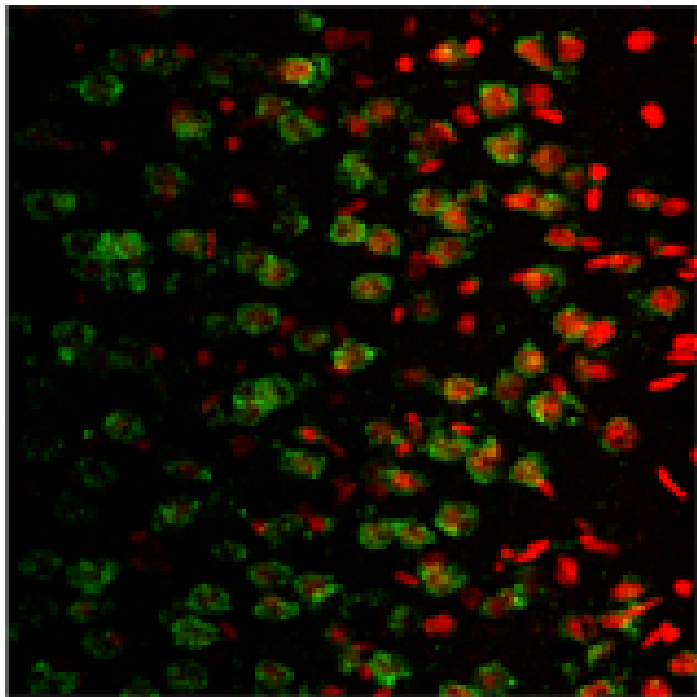
[View Online »](#)



Western blot analysis: MW marker (1) and 20µg rat brain extract (2) probed with Serotonin Receptor (5HT<sub>1A</sub>) pAb at 2µg/ml.



Cellular ELISA: HEK293 cells expressing serotonin receptor 5HT<sub>1A</sub> were treated with indicated concentrations of agonist (DPAT) and probed with Serotonin Receptor (5HT<sub>1A</sub>) pAb (1:1000 of a stock solution of 1µg/µL) by ELISA. Data from vehicle treated cells were taken as 100%. Results are the mean ± SEM (n=3).



Immunohistochemistry analysis: Fluorescent confocal photomicrograph of rat brain cortex fixed in 100% methanol was stained with propidium iodide (red) and Serotonin Receptor (5HT<sub>1A</sub>) pAb (green) at 1:1000.

## Handling & Storage

**Handling** Keep on ice at all times.

**Long Term Storage** -20°C

**Shipping** Blue Ice

**Regulatory Status** RUO - Research Use Only

## Product Details

**Alternative Name** 5-hydroxytryptamine receptor, 5-HTR

**Application** ELISA, IHC, WB

**Application Notes** Suitable for cell-based and membrane-based ELISA. Predicted MW of ~46kDa. Higher MW species (~50kDa) and intermediates also observed by Western blot which may reflect post-translational modification or dimerization of the receptor.

**Formulation** Liquid. In PBS containing 50% glycerol and 0.01% sodium azide.

**Host** Rabbit

**Immunogen** Synthetic peptide corresponding to the sequence near the N-terminus of mouse serotonin receptor 5HT1A.

**Purity Detail** Peptide affinity purified.

**Species Reactivity** Human, Mouse, Rat

**UniProt ID** Q64264

**Worry-free Guarantee** This antibody is covered by our [Worry-Free Guarantee](#)

Last modified: May 29, 2024



Enzo Life Sciences, INC.  
Phone: 800.942.0430  
[info-usa@enzolifesciences.com](mailto:info-usa@enzolifesciences.com)

European Sales Office  
ENZO LIFE SCIENCES  
(ELS) AG  
Phone: +41 61 926 8989  
[info-eu@enzolifesciences.com](mailto:info-eu@enzolifesciences.com)

Belgium, The Netherlands  
& Luxembourg  
Phone: +32 3 466 0420  
[info-fr@enzolifesciences.com](mailto:info-fr@enzolifesciences.com)

France  
Phone: +33 472 440 655  
[info-fr@enzolifesciences.com](mailto:info-fr@enzolifesciences.com)

Germany  
Phone: +49 7621 5500 526  
[info-de@enzolifesciences.com](mailto:info-de@enzolifesciences.com)

UK & Ireland  
Phone (UK customers):  
0845 601 1488  
Phone: +44 1392 825900  
[info-uk@enzolifesciences.com](mailto:info-uk@enzolifesciences.com)