# abcam

# Product datasheet

# Anti-5HT1A Receptor antibody ab85615

2 Abreviews 8 References 4 Images

Overview

Product name Anti-5HT1A Receptor antibody

**Description** Rabbit polyclonal to 5HT1A Receptor

Host species Rabbit

**Tested applications** Suitable for: IHC-FoFr, WB, IHC-P, ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human

Predicted to work with: Horse, Chicken, Dog, Chimpanzee, Gorilla, Orangutan

**Immunogen** Synthetic peptide corresponding to Rat 5HT1A Receptor aa 100-200 conjugated to keyhole

limpet haemocyanin.

Database link: P19327

(Peptide available as ab98259)

Positive control This antibody gave a positive signal in both Mouse and Rat hippocampus tissue lysate as well as

the following whole cell lysates: Caco2; HepG2; Jurkat. This antibody gave a positive result in IHC

in the following FFPE tissue: Human normal liver.

**Properties** 

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer Preservative: 0.02% Sodium Azide

Constituents: 1% BSA, PBS, pH 7.4

Purity Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

# **Applications**

Our Abpromise guarantee covers the use of ab85615 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

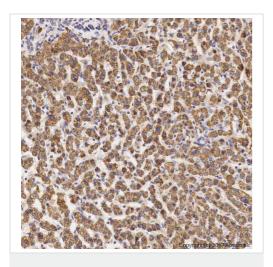
1

Application Abreviews	Notes
IHC-FoFr	Use at an assay dependent concentration. PubMed: 26076134
WB	Use a concentration of 1 $\mu$ g/ml. Detects a band of approximately 62 kDa (predicted molecular weight: 46 kDa).
IHC-P	Use a concentration of 5 µg/ml.
ICC/IF	Use a concentration of 5 µg/ml.

### **Target**

Function	This is one of the several different receptors for 5-hydroxytryptamine (serotonin), a biogenic hormone that functions as a neurotransmitter, a hormone, and a mitogen. The activity of this receptor is mediated by G proteins that inhibit adenylate cyclase activity.
Sequence similarities	Belongs to the G-protein coupled receptor 1 family. 5-hydroxytryptamine receptor subfamily. HTR1A sub-subfamily.
Cellular localization	Cell membrane.

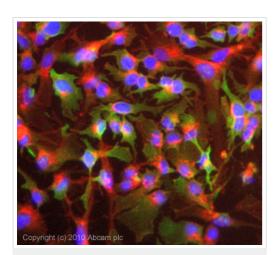
### **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-5HT1A Receptor antibody (ab85615)

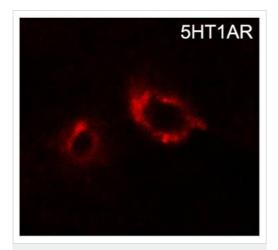
IHC image of 5HT1A Receptor staining in Human normal liver formalin fixed paraffin embedded tissue section, performed on a Leica BondTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab85615, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunocytochemistry/ Immunofluorescence - Anti-5HT1A Receptor antibody (ab85615)

ICC/IF image of ab85615 stained HepG2 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab85615, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-5HT1A Receptor antibody (ab85615) Image from Zheng, Yaxin et al. PLoS ONE 10.6 (2015): e0130055. doi: 10.1371/journal.pone.0130055. Fig 5C.

Immunohistochemistry (PFA perfusion fixed frozen sections) analysis of rat hippocampus labelling 5HT1A with ab85615 (red). For immunofluorescence analysis, the rats were anaesthetized using chloral hydrate and then were perfused with 150 mL of saline solution and 150–200 mL of 4% paraformaldehyde in 0.1 M phosphate buffer (PB). Then, the brains of the rats were isolated and fixed in 4% paraformaldehyde for 2–3 h. The rat brain sections were cut on a freezing microtome at a thickness of 16 µm and were washed with phosphate-buffered saline (PBS) and pre-incubated in 5% horse serum. Subsequently, the sections were incubated with Anti-5HT1A Receptor antibody (ab85615) for 24 h at 4°C, washed with PBS and incubated with the secondary antibody and neuro tracer for 2 h at room temperature while protected from light. The sections were examined on a Nikon C2 plus confocal laser-scanning microscope.



Western blot - Anti-5HT1A Receptor antibody (ab85615)

All lanes: Anti-5HT1A Receptor antibody (ab85615) at 1 μg/ml

Lane 1 : Caco 2 (Human colonic carcinoma cell line) Whole Cell Lysate

Lane 2: Rat Hippocampus Tissue Lysate

Lane 3: Mouse Hippocampus Tissue Lysate

Lane 4 : HepG2 (Human hepatocellular liver carcinoma cell line)

Whole Cell Lysate

Lane 5 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell

Lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 46 kDa Observed band size: 62 kDa

why is the actual band size different from the predicted?

Additional bands at: 37 kDa, 48 kDa. We are unsure as to the

identity of these extra bands.

Exposure time: 30 seconds

The expression profile observed is consistent with what has been described in the literature (PMID: 16772521).

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors