

# GABA Antibody – Rabbit Polyclonal

Ref: IS1006

The anti-GABA antibody IS1006 rabbit polyclonal antibody displays high affinity and specificity and allows direct detection of GABA in whole mounts, cell culture and tissue sections when samples are prepared using the [STAINperfect immunostaining kit A](#).

<b>Clonality</b>	Polyclonal antibody
<b>Host</b>	Rabbit
<b>Reactivity</b>	Reacts with all species
<b>Tested samples</b>	Whole mounts, cell culture, tissue sections
<b>Staining procedure</b>	<a href="#">STAINperfect immunostaining kit A</a>
<b>Format</b>	50µL (approx. 40 tissue sections)
<b>References</b>	<a href="#">Cited in 3 papers</a>

# INFORMATIONS

## Product overview

<b>Product name</b>	GABA antibody – Rabbit Polyclonal antibody
<b>Synonyms</b>	Anti-Gamma-Aminobutyric acid antibody
<b>Immunogen</b>	Conjugated GABA
<b>Specificity</b>	When tested in competitive ELISA, the anti-conjugated GABA antibody did not show any significant cross reactivity with Gamma-Aminobutyric acid analogs, including Beta-Alanine and D-Alanine
<b>Volume</b>	50µL

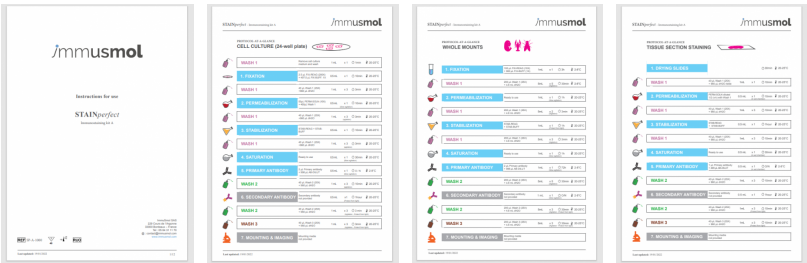
## Storage

<b>Form</b>	Liquid
<b>Purity</b>	Purified anti-serum
<b>Storage</b>	Store at +4°C for short term (1-2 months). Aliquot and store at -20°C for long term. Avoid repeated freeze / thaw cycles
<b>Material safety datasheet</b>	<a href="#">Download MSDS</a>

PROTOCOLS

IF - Cell cultures, Whole mounts, Tissue sections	Dilute antibody with the antibody diluent provided in the <a href="#">STAINperfect immunostaining kit A</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	<a href="#">Download STAINperfect protocol for GABA staining</a>

Protocols-at-a-glance

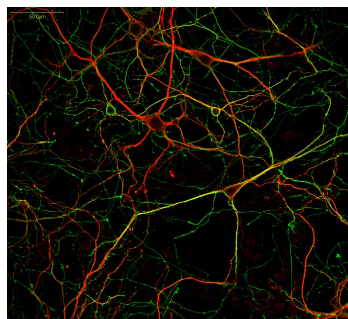


- [Complete Instructions for Use](#)
- [Protocol-at-a-glance for cell cultures](#)
- [Protocol-at-a-glance for whole mounts](#)
- [Protocol-at-a-glance for tissue sections](#)

REFERENCES

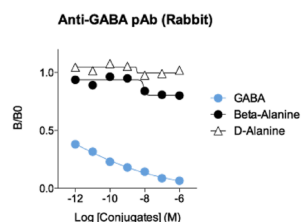
Product citation

Product pictures



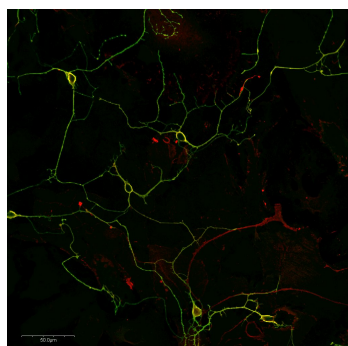
### GABA labeling (green) in mouse cortical primary neurons

Immunodetection of GABA- (green) and MAP2- (red) positive neurons in mouse primary cortical culture. GABAergic neurons were stained using IS1006 anti-GABA antibody combined with MAP2 antibody using the stainperfect immunostaining kit A and appropriate protocol, respectively. Alexa fluor 488 and 546 secondary antibodies were used and pictures were captured by high-content imaging.



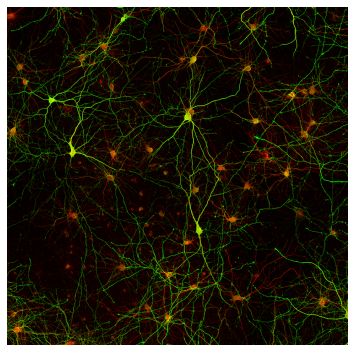
### Affinity & specificity of anti-GABA antibody

Competitive ELISA demonstrates that low amounts of GABA conjugate are required to abolish antigen-antibody reaction (high affinity), while rising concentrations of  $\beta$ -Alanine and D-Alanine conjugates do not affect reaction (high specificity).



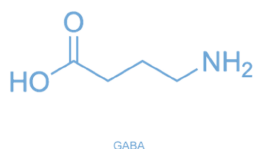
### L-Glutamate and GABA in adult mouse primary cortical neurons

Adult mouse primary cortical neurons were stained with mouse monoclonal anti-L-glutamate antibody (red) combined with anti-GABA rabbit polyclonal antibody (green). Staining was performed using optimized sample preparation with STAINperfect immunostaining kit A and according to the protocol for cell culture. Fluorescent labeled secondary antibody were used and pictures were acquired by confocal imaging.

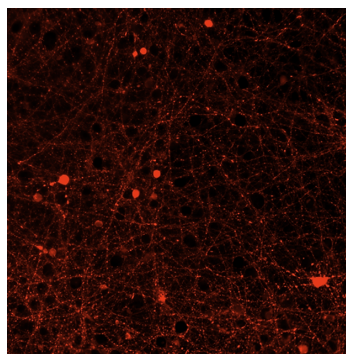


### GABA labeling (green) in rat cortical primary neurons

Immunodetection of GABA- (green) and MAP2- (red) positive neurons in rat primary cortical culture. Total and GABAergic neurons were stained using an anti-MAP2 antibody and IS anti-GABA antibody combined with the stainperfect immunostaining kit A and appropriate protocol, respectively. Alexa fluor 546 and 488 secondary antibodies were used and pictures were captured by high-content imaging.

**Gamma-aminobutyric acid (GABA)**

In the mammalian brain, inhibitory neurotransmitter Gamma-aminobutyric acid (GABA) is mainly synthesized from excitatory L-Glutamate by enzyme glutamic acid decarboxylase (GAD). Regulating neuronal excitability, GABAergic synapses are present throughout the CNS, although GABA is found most highly concentrated in the substantia nigra, the globus pallidus nuclei, the hypothalamus, the periaqueductal grey matter and the hippocampus.

**GABAergic neuronal network**

## Contact information

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

<https://www.immusmol.com/shop/gaba-rabbit-pab/>