

# L-Tryptophan Antibody – Mouse Monoclonal

Ref: IS011

The anti-Tryptophan antibody IS011 is a mouse monoclonal antibody optimized to ensure high affinity and specificity. Combined with the [STAINperfect immunostaining kit A](#), this antibody allows direct L-Tryptophan visualization in whole mounts, cell cultures, and tissue sections.

|                           |   |
|---------------------------|---|
| <b>Clonality</b>          | Monoclonal antibody (clone 4H11-A11)              |
| <b>Host</b>               | Mouse   |
| <b>Reactivity</b>         | Reacts with all species                           |
| <b>Eligible samples</b>   | Whole mounts, cell cultures, 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 2 papers</a>                 |

# INFORMATIONS

## Product overview

|                     |   |
|---------------------|---|
| <b>Product name</b> | L-Tryptophan antibody   |
| <b>Synonyms</b>     | Anti-L-Trp antibody<br>(S)-2-Amino-3-(3-indolyl)propionic acid antibody<br>L-alpha-Amino-3-indolepropionic acid antibody<br>(S)-2-Amino-3-(3-indolyl)propanoic acid antibody<br>L-alpha-Amino-3-indolepropanoic acid antibody |
| <b>Immunogen</b>    | Conjugated L-Tryptophan   |
| <b>Isotype</b>      | IgG1 k chain  |
| <b>Specificity</b>  | When tested in competitive ELISA, the anti-conjugated L-Tryptophan antibody did not show any significant cross reactivity with Tryptophan analogs, including Tryptamine   |
| <b>Volume</b>       | 50µL  |

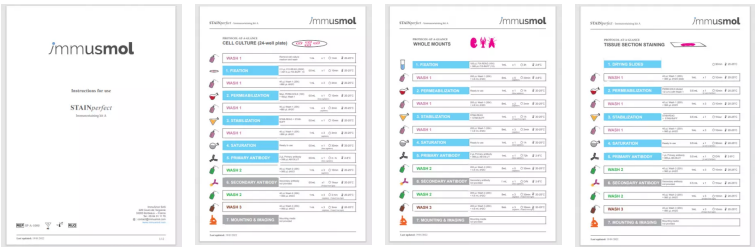
## Storage

|                                  |  |
|----------------------------------|--|
| <b>Form</b>                      | Liquid   |
| <b>Purity</b>                    | Purified IgG   |
| <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 dopamine staining</a>  |

Protocols-at-a-glance

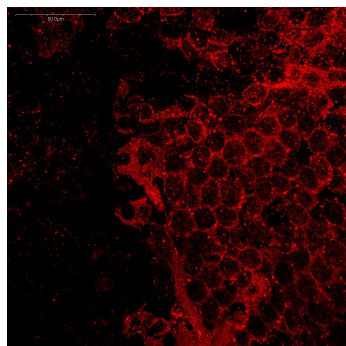


- [Complete Instructions for Use](#)
- [Protocol-at-a-glance for cell cultures](#)
- [Protocol-at-a-glance for whole mounts](#)
- [Protocol-at-a-glance for tissue sections](#)

REFERENCES

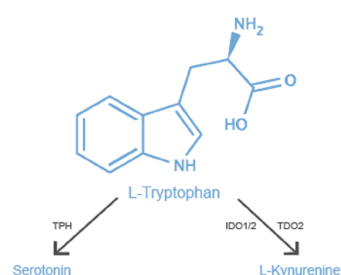
Production citations

Product pictures



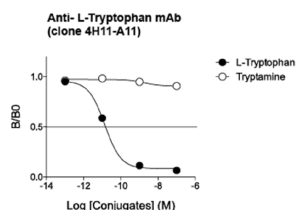
### Tryptophan detection in the crayfish brain

Anti-Tryptophan antibody demonstrates the presence of Tryptophan positive cells in the brain of a crayfish. Staining was obtained with mouse monoclonal anti-Tryptophan antibody (IS011) and performed with STAINperfect immunostaining kit A, following the protocol for whole mount samples. Fluorescent conjugated secondary antibody was used and images obtained by confocal imaging at high magnification (x40).



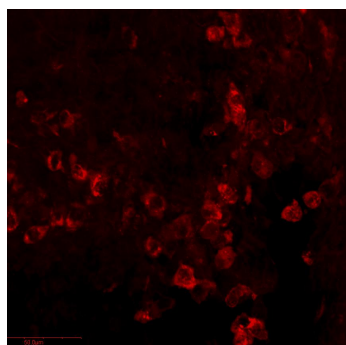
### Amino acid L-Tryptophan

L-Tryptophan is an essential amino acid, which is converted into Serotonin by tryptophan hydroxylase (TPH) in the gut or brain, or catabolized by various cell types into L-Kynurenine through indoleamine 2,3-dioxygenase (IDO1/2) or tryptophan 2,3-dioxygenase (TDO2). Abnormal tryptophan metabolism is implicated in a wide range of pathological states, including metabolic and auto-immune diseases, cancer, viral infections, as well as neurodegenerative and mood disorders.



### Affinity & specificity of anti- L-Tryptophan antibody

Competitive ELISA demonstrates that low amounts of L-Tryptophan conjugate are required to abolish antigen-antibody reaction (high affinity), while rising concentrations of L-Tryptophan analog tryptamine do not affect reaction (high specificity).



### Tryptophan immunostaining in the CNS of embryonic mouse

Using STAINperfect immunostaining kit A, Tryptophan was detected in the hindbrain of embryonic mouse E15.5. Staining was obtained following the protocol optimized for whole mount using IS011 mouse monoclonal antibody targeting L-Tryptophan. Fluorescent conjugated secondary antibodies were then used and images captured by confocal microscopy at high magnification.

## Contact information

Immusmol

229 Cours de l'Argonne

33 000 Bordeaux - France

Tel: +33 (0) 5 6431 1170

[www.immusmol.com](http://www.immusmol.com)

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

<https://www.immusmol.com/shop/l-tryptophan-mab/>