

# Kynurenic acid Antibody – Mouse Monoclonal

Ref: IS010

The monoclonal IS010 anti-Kynurenic acid antibody was validated for IHC and IF in human caudate putamen tissues. Competitive ELISA demonstrated the antibody to be highly affine and specific.

<b>Clonality</b>	Monoclonal antibody (clone 4G12-A12)
<b>Host</b>	Mouse
<b>Validated applications</b>	<a href="#">IHC / IF</a>
<b>Specie reactivity</b>	Reacts with all species
<b>References</b>	Not yet cited to our knowledge. Submit content and <a href="#">get a 10% discount!</a>
<b>Format</b>	50µL
<b>References</b>	<a href="#">Cited in literature</a>

## INFORMATIONS

---

### Product overview

<b>Product name</b>	Kynurenic acid antibody
<b>Synonyms</b>	Kinurenic acid antibody 4-Hydroxyquinoline-2-carboxylic acid antibody KYNA antibody
<b>Immunogen</b>	Conjugated kynurenic acid
<b>Isotype</b>	IgG1 k chain
<b>Clone</b>	clone 4G12-A12
<b>Specificity</b>	When tested in competitive ELISA, the anti-Kynurenic antibody 4G12-A12 did not show any significant cross reactivity with Quinaldic, Xanthurenic, Anthranilic, Picolinic or Quinolinic acid conjugates

### Storage

<b>Form</b>	Liquid
<b>Purity</b>	Purified IgG
<b>Concentration</b>	0,5mg/ml
<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>

---

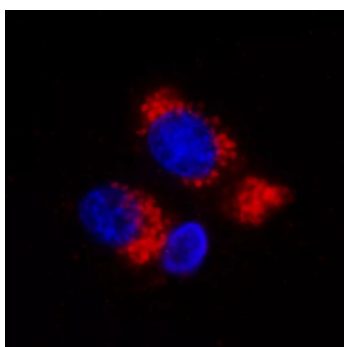
## PROTOCOLS

<b>Immunohistochemistry (IHC)</b>	Dilute at 1:200-1:2000. Perform heat antigen retrieval (pH=6) before initiating IHC staining protocol on paraffin-embedded and frozen sections
<b>Immunofluorescence (IF)</b>	1:100-1:1000 on paraffin-embedded and frozen sections. Before staining, perform heat antigen retrieval
<b>Comments</b>	Optimal working dilutions must be determined by the end-user
<b>Restrictions</b>	For research use only

## REFERENCES

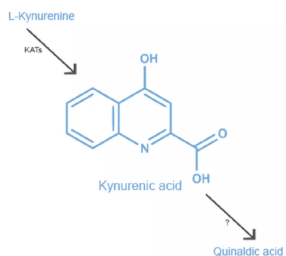
### Literature citations

## Product pictures



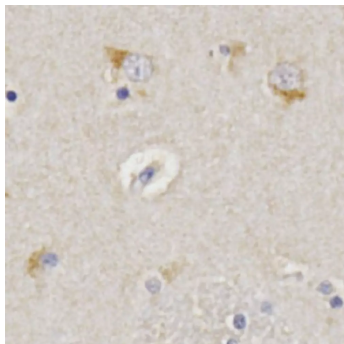
### Kynurenic acid detection in human brain by IF (mouse mAb)

Immunofluorescence shows kynurenic acid accumulation in the cytoplasm of glial cells in human caudate-putamen. Paraffin-embedded tissue section was subjected to pH=6 antigen retrieval followed by overnight incubation with primary anti-Kynurenic acid antibody (dilution 1/250). After incubation with fluorescent dye-conjugated secondary Ab, epifluorescence microscopy (100X) was used to visualize the staining.



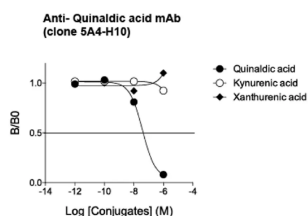
### Kynurenic acid

Aerobic L-tryptophan degradation via the kynurenine pathway produces a range of neuroactive metabolites, including endogenous neurotoxin quinolinic acid and neuroprotective kynurenic acid. Kynurenic acid indeed possesses several molecular targets with antagonistic activities on the NMDA receptor and the  $\alpha 7$ -nicotinic cholinergic receptor ( $\alpha 7$ NR). Recently Kynurenic acid was also described to activate the orphan G-protein-coupled receptor GPR35.



### Kynurenic acid detection in human brain by IHC

Immunohistochemical analysis highlights cytoplasmic presence of kynurenic acid in glial cells in human caudate putamen. Paraffin-embedded brain tissue section was subjected to pH=6 antigen retrieval followed by overnight incubation with primary anti-kynurenic acid antibody (dilution 1/500). After incubation with polymer-conjugated secondary Ab, DAB was used to visualize the staining.



### Affinity & Specificity of anti-Quinaldic acid antibody

Competitive ELISA demonstrates that moderate amounts of Quinaldic acid conjugate are required to abolish antigen-antibody reaction (satisfying affinity), while rising concentrations of Kynurenic and Xanthurenic acid conjugates do not affect the reaction (high specificity).

## 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/kynurenic-acid-mab/>