

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.

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

INFORMATIONS

Product overview

| | |
|---------------------|--|
| Product name | Kynurenic acid antibody |
| Synonyms | Kinurenic acid antibody 4-Hydroxyquinoline-2-carboxylic acid antibody KYNA antibody |
| Immunogen | Conjugated kynurenic acid |
| Isotype | IgG1 k chain |
| Clone | clone 4G12-A12 |
| Specificity | 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

| | |
|----------------------------------|--|
| Form | Liquid |
| Purity | Purified IgG |
| Concentration | 0,5mg/ml |
| Storage | Store at +4°C for short term (1-2 months). Aliquot and store at -20°C for long term. Avoid repeated freeze / thaw cycles |
| Material safety datasheet | Download MSDS |

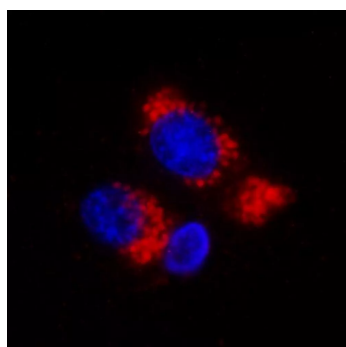
PROTOCOLS

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

REFERENCES

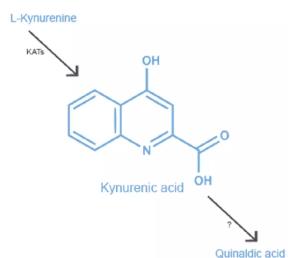
Literature citations

Product pictures



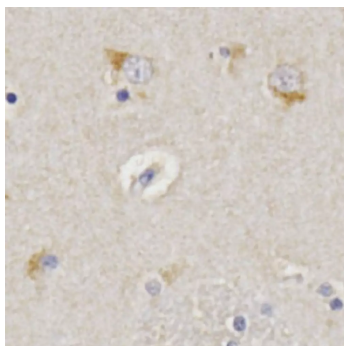
Kynurenic acid detection in human brain by IF (mouse mAb)

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.



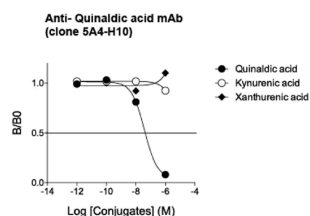
Kynurenic acid

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 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

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

<https://www.immusmol.com/shop/kynurenic-acid-mab/>