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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

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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

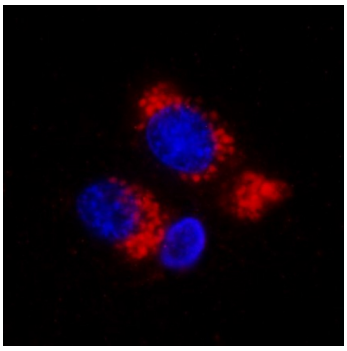
PROTOCOLS

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

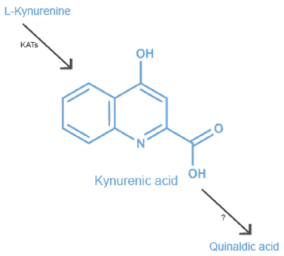
Literature citations

Product pictures



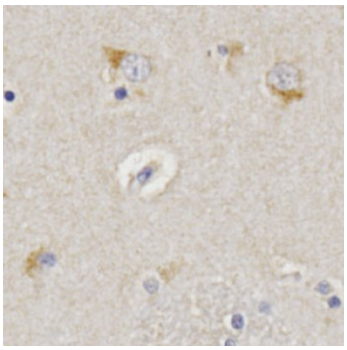
Kynurenic acid detection in human brain by IF (mouse mAb)

Immufluorescence 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.



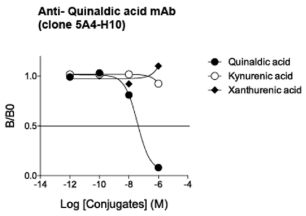
Kynurenic acid

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 a7-nicotinic cholinoceptor (a7NR). 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

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

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