Quinolinic acid Antibody – Mouse Monoclonal

Ref: IS002

This mouse monoclonal antibody to Quinolinic acid was validated for IF & IHC in human brain tissues. It was recently used in 3 papers to evidence the role of Quinolinic acid in atherogenesis & glioblastoma.

Clonality	Monoclonal antibody (clone 4E11-G3)
Host	Mouse
Valided applications	IHC / IF
Reactivity	Reacts with all species
References	Not yet cited to our knowledge Submit content and get a 10% discount!
Format	50µL
References	Cited in 4 papers

INFORMATIONS

Product overview

Product name	Quinolinic acid antibody
Synonyms	Pyridine-2,3-dicarboxylic acid antibody 2,3-pyridinedicarboxylic acid antibody 3,4-Pyridinedicarboxylic acid antibody Pyridine-3,4-dicarboxylic acid antibody
Immunogen	Conjugated quinolinic acid
Isotype	IgG1 k chain
Clone	clone 4E11-G3
Specificity	When tested in competitive ELISA, the anti-Quinolinic acid antibody did not show any significant cross reactivity with Picolinic and Quinaldic 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

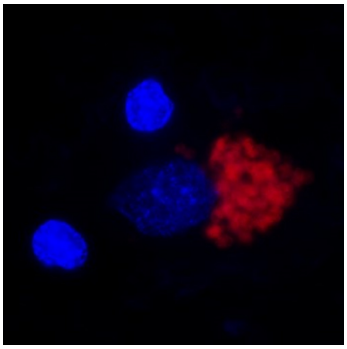
PROTOCOLS

Immunohistochemistry (IHC)	Dilute at 1:100-1:1000. Perform heat antigen retrieval (pH=9) before initiating IHC staining protocol on paraffin-embedded and frozen sections
Immunofluorescence (IF)	Dilute at 1:50-1:500 on paraffin-embedded and frozen sections. Perform heat antigen retrieval and incubate fluorescent dyes conjugated secondary antibody
Comments	Optimal working dilutions must be determined by the end-user
Restrictions	For research use only

REFERENCES

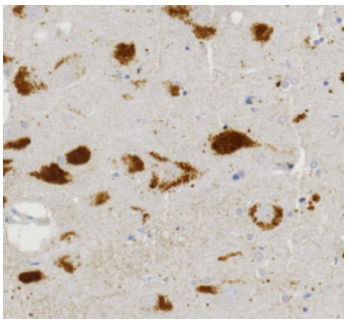
Product citations

Product pictures



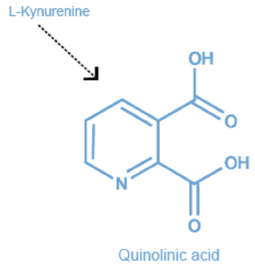
Quinolinic acid detection in human midbrain by immunohistofluorescence (IHF) Quinolinic acid detection in human midbrain by immunohistofluorescence (IHF) Quinolinic acid detection in human midbrain by immunohistochemistry (IHC) Anti-Quinolinic acid antibody affinity & specificity Quinolinic acid Quinolinic acid detection in human midbrain by immunohistofluorescence (IHF)

Immunofluorescence staining highlights nuclear exclusion of Quinolinic acid in human midbrain. Paraffin-embedded brain tissue section was subjected to pH=9 antigen retrieval followed by overnight incubation with primary anti-Quinolinic acid antibody (dilution 1/250). After incubation with Alexa-555 conjugated secondary Ab, epifluorescence microscopy (100X) was used to visualize the staining.



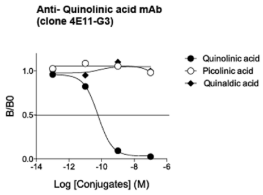
Quinolinic acid detection in human midbrain by immunohistochemistry (IHC)

Immunohistochemical analysis reveals cytoplasmic presence of Quinolinic acid in human midbrain tissue. Paraffin-embedded tissue section was subjected to pH=9 antigen retrieval followed by overnight incubation with primary anti-quinolinic acid antibody (dilution 1/500). After incubation with polymer-conjugated secondary Ab, DAB was used to visualize the staining.



Quinolinic acid

Tryptophan catabolism along the kynurenine pathway produces neuroactive metabolites, with prototypical neurotoxin Quinolinic acid as a 'chef de file'. Known to be involved in a wide range of neurodegenerative diseases (Amyotrophic lateral sclerosis, Alzheimer's & Parkinson's diseases, ...) as well as psychiatric disorders (depression, schizophrenia, ...), Quinolinic acid induces neuronal damage. Activation of the NMDA-receptor, oxidative stress induction or mitochondrial dysfunction could explain quinolinic acid-induced neurotoxicity.



Anti- Quinolinic acid antibody affinity & specificity

Competitive ELISA demonstrates that low amounts of Quinolinic acid conjugate are required to abolish antigen-antibody reaction (high affinity), while rising concentrations of Picolinic and Quinaldic 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/quinolinic-acid-mab/