

Quinaldic acid monoclonal antibody

Ref: IS004

Our anti-Quinaldic acid antibody is a mouse monoclonal antibody, which was validated for immunohistochemistry (IHC) and immufluorescence (IF) in paraffin-embedded tissues from human caudate-putamen region.

| Clonality | Monoclonal antibody (clone 5A4-H10) |
|----------------------|---|
| Host | Mouse |
| Valided applications | IHC / IF |
| Specie reactivity | Reacts with all species |
| References | Not yet cited to our knowledge Submit content and <u>get a 10% discount!</u> |
| Format | 50µl |
| | |

Product overview

| Product name | Quinaldic acid antibody |
|--------------|---|
| Synonyms | 2-Quinolinecarboxylic acid antibody Quinolin-2-carboxylate acid antibody |
| Immunogen | Conjugated Quinaldic acid |
| Isotype | IgG1 k chain |
| Clone | clone 5A4-H10 |
| Specificity | When tested in competitive ELISA, the anti-Quinaldic acid antibody did not show any significant cross reactivity with Kynurenic and Xanthurenic acid conjugates |
| Lot number | 140201 |

Reconstitution & storage

| Form | Lyophilized powder |
|----------------|--|
| Purity | Purified IgG |
| Concentration | 0,5 mg/ml |
| Storage | Store at 4°C |
| Storage buffer | Before use, vial should be resuspended in 50 μ L of ultrapure water. Store at +4 °C for short term (1-2 weeks). Aliquot and store at -20 °C for long term. Avoid repeated freeze / thaw cycles |

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) | Dilute at 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

Antibody not yet cited. Submit an article and get a 10% discount.

Selected publication on Quinaldic acid:

Liu SY1, Zhang RL, Kang H, Fan ZJ, Du Z. Human liver tissue metabolic profiling research on hepatitis B virus-related hepatocellular carcinoma. World J Gastroenterol. 2013 Jun 14;19(22):3423-32. doi: 10.3748/wjg.v19.i22.3423.

Product pictures



Quinaldic acid

Despite growing interest on the role of kynurenines in immune regulation and neurotransmission, very few publications address the biological activity of Quinaldic acid, the direct by-product of neuroprotective kynurenic acid. In the 1970's, Quinaldic acid was described as a key regulator of glycemia. More recently, this kynurenine metabolite was found to be associated with hepatitis B virusrelated hepatocellular carcinoma.



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).



Quinaldic acid detection by IHC in human brain

Immunohistochemical analysis of human caudate putamen reveals Quinaldic acid accumulation in the cytoplasm of glial cells. Paraffin-embedded tissue was subjected to pH=6 antigen retrieval followed by overnight incubaton with primary anti-Quinaldic antibody (dilution 1/1000). After incubation with polymer conjugated secondary Ab, staining visualization was performed with DAB.



Quinaldic acid detection by IF in human brain

Quinaldic acid visualization by immunofluorescence in human caudate putamen. Staining illustrates cytoplasmic accumulation of Quinaldic acid in glial cells. Paraffin-embedded tissue section was subjected to pH=6 antigen retrieval followed by overnight incubation with primary antibody (dilution 1/500). After incubation with Alexa-555 conjugated secondary Ab, epifluorescence microscopy (10X) was used to capture the staining.

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