

# Anthranilic acid Antibody – Mouse Monoclonal

Ref: IS013

The monoclonal anti-Anthranilic acid antibody 10G1-F1 was validated for immunohistochemistry (IHC) in human brain tissues. Highly specific, as demonstrated by competitive ELISA, the antibody consistently delivered clean and reproducible stainings.

Clonality	Monoclonal antibody (clone 10G1-F1)
Host	Mouse
Valided applications	<u>IHC</u>
Reactivity	Reacts with all species
Format	50μL



# **INFORMATIONS**

Product overview	
Product name	Anthranilic acid antibody
Synonyms	2-AA antibody Anti- vitamin L1 antibody Anti- Anthranilate antibody Anthranilate antibody 2-Aminobenzoic acidantibody
Immunogen	Conjugated Anthranilic acid
Clone	10G1-F1
Specificity	When tested in competitive ELISA, the anti-anthranilic antibody did not show any significant cross reactivity with 3-hydroxyAnthranilic acid
Storage	
Form	Liquid
Purity	Purified IgG
Concentration	0,5mg/ml
Storage	Store at 4°C
Storage buffer	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 1:50-1:500. Perform heat antigen retrieval (pH=6) 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 with incubate with fluorescent secondary antibody conjugate
Comments	Optimal working dilutions must be determined by the end-user
Restrictions	For research use only

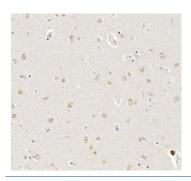
## **REFERENCES**

### **Selected publications about Anthranilic acid:**

- Coburn C, Allman E, Mahanti P, Benedetto A, Cabreiro F, Pincus Z, Matthijssens F, Araiz C, Mandel A, Vlachos M, Edwards SA, Fischer G, Davidson A, Pryor RE, Stevens A, Slack FJ, Tavernarakis N, Braeckman BP, Schroeder FC, Nehrke K, Gems D. Anthranilate fluorescence marks a calcium-propagated necrotic wave that promotes organismal death in C. elegans. PLoS Biol. 2013 Jul;11(7):e1001613. doi: 10.1371/journal.pbio.1001613. Epub 2013 Jul 23.
- Palmer GC, Jorth PA, Whiteley M. The role of two Pseudomonas aeruginosa anthranilate synthases in tryptophan and quorum signal production. Microbiology. 2013 May;159(Pt 5):959-69. doi: 10.1099/mic.0.063065-0. Epub 2013 Feb 28.
- Shibata K, Fukuwatari T. The metabolites in the tryptophan degradation pathway might be useful to determine the tolerable upper intake level of tryptophan intake in rats. J Nutr. 2012 Dec;142(12):2227S-2230S. doi: 10.3945/jn.112.163469. Epub 2012 Oct 17.

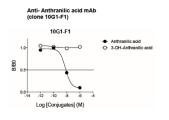
# Product pictures





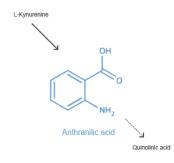
### Anthranilic acid detection by IHC in human brain

Immunohistochemical analysis of human caudate-putamen highlights Anthranilic acid accumulation in the cytoplasm of glial cells. Paraffin-embedded brain tissue was subjected to pH=6 antigen retrieval followed by overnight incubation with primary antibody (dilution 1/50). After incubation with polymer conjugated secondary Ab, DAB was used to reveal the staining.



### Affinity & specificity of anti-Anthranilic acid antibody

Competitive ELISA demonstrates that low amounts of Anthranilic acid conjugate are required to abolish antigen-antibody reaction (high affinity), while rising concentrations of 3-OH-Anthranilic acid conjugate do not affect reaction (high specificity).



#### **Anthranilic acid**

Tryptophan catabolism along the kynurenine pathway has been extensively investigated over the past decades for its roles in immune regulation and neurotransmission. Anthranilic acid is synthesized directly from L-kynurenine, to produce 3-hydroxyanthranilic acid without generation of neurotoxic 3-OH-Kynurenine. Recently, Anthranilic acid has been described in organismal death of C.elegans, as well as in pathogen Pseudomonas aeruginosa's tryptophan catabolism.

### Contact information

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



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