

# Cinnabarinic acid Antibody – Mouse Monoclonal

Ref: IS005

The first and only validated anti-Cinnabarinic acid antibody available for research use. IHC validation of this mouse mAb in human brain and breast tumor tissues revealed the presence, in specific cells, of Cinnabarinic acid, a tryptophan metabolite known for its immunomodulatory role. A 2020 paper also used this anti-cinnabarinic antibody to stain mouse brain tissue sections (immunofluorescence).

Clonality	Monoclonal antibody (clone 5C5-E10)
Host	Mouse
Valided applications	IHC & IF
Reactivity	Reacts with all species
Format	50μL
References	Cited in 1 paper



# **INFORMATIONS**

<b>Product overview</b>	
Product name	Cinnabarinic acid antibody
Synonyms	2-amino- 3-oxo- 3H-phenoxazine-1,9-dicarboxylic acid antibody
Immunogen	Conjugated Cinnabarinic acid
Isotype	IgG1 k chain
Clone	clone 5C5-E10
Specificity	When tested in competitive ELISA, the anti-Cinnabarinic acid antibody 5C5-E10 did not cross-react with its precursor, 3-OH-Anthranilic acid conjugates

### **Storage**

Form	Liquid
Purity	Purified IgG
Concentration	0,5mg/ml
Storage	Store at +4°C for short term (6 months). Aliquot and store at -20°C for long term. Avoid repeated freeze / thaw cycles
Material safety datasheet	Download MSDS



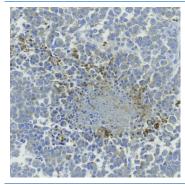
## **PROTOCOLS**

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)	Dilute at 1:100-1:1000 on paraffin-embedded and frozen sections. Perform heat antigen retrieval and incubate with fluorescent secondary antibody conjugate
Comments	Optimal working dilutions must be determined by the end-user
Restrictions	For research use only

## **REFERENCES**

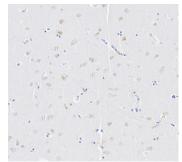
**Product citation** 

# Product pictures



#### Cinnabarinic acid detection by IHC in human breast tumor

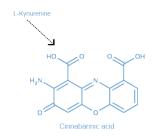
Immunohistochemical staining of human breast tumor tissue shows presence of Cinnabarinic acid in cells surrounding a necrotic area. Paraffin-embedded tumor tissue was subjected to pH=6 antigen retrieval before overnight incubation with primary anti-Cinnabarinic antibody (1/500 dilution). A polymer-conjugated secondary Ab was added and immunostaining was revealed using DAB.



#### Cinnabarinic acid detection by IHC in human caudate putamen

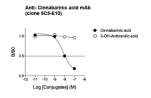
IHC staining highlights the presence of Cinnabarinic acid in glial cells of the caudate-putamen region in human brain tissue. Paraffin-embedded tissue section was subjected to pH=6 antigen retrieval followed by overnight incubation with primary antibody (dilution 1/500). After incubation with polymer-conjugated secondary Ab, DAB was used to visualize the staining.





#### Cinnabarinic acid

Cinnabarinic acid is a downstream metabolite of the kynurenine pathway wich is produced by condenstaion of two molecules of 3HAA. It was recently presented as an Aryl Hydrocarbon Receptor ligand driving IL-22 production. Also, Cinnabarinic acid was found to act as an orthosteric agonist of type-4 metabotropic glutamate (mGlu4) receptor 4, featuring anti-inflammatory activity.



#### **Specificity of anti-Cinnabarinic acid antibody**

Competitive ELISA demonstrates that moderate amount of cinnabarinic acid conjugate is required to abolish antigen-antibody reaction (satisfying affinity), while rising concentrations of 3-OH-Anthranilic acid conjugate 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/cinnabarinic-acid-mab/