3-Hydroxyanthranilic acid antibody – Rabbit Polyclonal

Ref: IS1008

This is the first and only anti-3-Hydroxy-Anthranilic acid (3-HAA) rabbit polyclonal antibody available for research use. Confirmed to be highly specific and affine by competitive ELISA, the antibody is currently being validated for IHC and IF use.

Clonality	Polyclonal
Host	Rabbit
Valided applications	IHC / IF
Reactivity	Reacts with all species
Format	50µl

INFORMATIONS

Product overview

Product name	3-Hydroxyanthranilic acid rabbit polyclonal antibody
Synonyms	Anti-3-Hydroxy-Anthranilic acid polyclonal antibody 2-Amino-3-hydroxybenzoic acid polyclonal antibody 3-OH-Anthranilic acid polyclonal antibody 3-hydroxanthranilate polyclonal antibody 3-OHAA polyclonal antibody 3-HAA polyclonal antibody
Immunogen	Conjugated 3-Hydroxyanthranilic acid
Specificity	When tested by competitive ELISA, the anti- 3-HydroxyAnthranilic acid polyclonal antibody did not show any significant cross reactivity with Anthranilic acid or quinolinic acid conjugates

Reconstitution & storage

Form	Liquid
Purity	Purified anti-serum
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

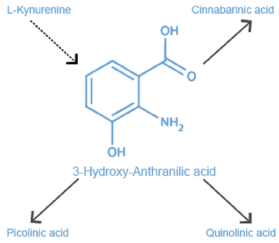
Immunocytochemistry(ICC)	Dilute at 1:200-1:2000. Perform heat antigen retrieval (pH=6) before initiating IHC staining protocol on paraffin-embedded and frozen sections
Immunohistochemistry (IHC)	Dilute at 1:100-1:1000 on paraffin-embedded and frozen sections. Perform heat antigen retrieval and incubate with fluorescent secondary antibody conjugate
Immunohistofluorescence (IHF)	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

Selected publications on 3-HydroxyAnthranilic acid:

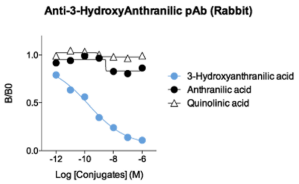
- Lee WS et al. Int Immunopharmacol. The tryptophan metabolite 3-hydroxyanthranilic acid suppresses T cell responses by inhibiting dendritic cell activation. 2013 Nov;17(3):721-6. doi: 10.1016/j.intimp.2013.08.018. Epub 2013 Sep 9.
- Adams S et al. The kynurenine pathway in brain tumor pathogenesis. Cancer Res. 2012 Nov 15;72(22):5649-57. doi: 10.1158/0008-5472.CAN-12-0549. Epub 2012 Nov 9.
- Krause D et al. The tryptophan metabolite 3-hydroxyanthranilic acid plays anti-inflammatory and neuroprotective roles during inflammation: role of hemeoxygenase-1. Am J Pathol. 2011 Sep;179(3):1360-72. doi: 10.1016/j.ajpath.2011.05.048.
- Yan Y et al. IDO upregulates regulatory T cells via tryptophan catabolite and suppresses encephalitogenic T cell responses in experimental autoimmune encephalomyelitis. J Immunol. 2010 Nov 15;185(10):5953-61. doi: 10.4049/jimmunol.1001628. Epub 2010 Oct 13.
- Hayashi T et al. 3-Hydroxyanthranilic acid inhibits PDK1 activation and suppresses experimental asthma by inducing T cell apoptosis. Proc Natl Acad Sci U S A. 2007 Nov 20;104(47):18619-24. Epub 2007 Nov 14.

Product pictures



3-Hydroxy-Anthranilic acid

Tryptophan catabolism can be initiated by either indoleamine 2,3 dioxygenase 1 and 2 (IDO1 and IDO2) or the tryptophan 2,3 dioxygenase 2 (TDO2) to produce a series of catabolites collectively known as kynurenines. This pathway has been extensively studied for its immune regulatory functions. The production of 3-hydroxy-Anthranilic acid (3HAA) is thought to play a key role in this phenomenon, with PDK1 being the only molecular target identified. Also, 3HAA has been shown to exert anti-inflammatory effects when administered in an experimental model of multiple sclerosis mice (EAE).



Affinity & specificity of anti-Anthranilic acid rabbit polyclonal antibody

Competitive ELISA demonstrates that relatively low amounts of Anthranilic acid conjugate are required to abolish antigen-antibody reaction (moderate affinity), while rising concentrations of 3-HydroxyAnthranilic acid (3-HAA) conjugate do not affect 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/3-hydroxyanthranilic-acid-pab/