

# 3-Hydroxyanthranilic acid polyclonal antibody

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.

<b>Clonality</b>	Polyclonal
<b>Host</b>	Rabbit
<b>Validated applications</b>	<u>IHC / IF</u>
<b>Species reactivity</b>	Reacts with all species
<b>References</b>	Not yet cited to our knowledge. Submit content and <a href="#">get a 10% discount!</a>
<b>Format</b>	50µl

# Product information

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## Product overview

<b>Product name</b>	3-Hydroxyanthranilic acid rabbit polyclonal antibody
<b>Synonyms</b>	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
<b>Immunogen</b>	Conjugated 3-Hydroxyanthranilic acid
<b>Specificity</b>	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
<b>Lot number</b>	140401

## Reconstitution & storage

<b>Form</b>	Lyophilized powder
<b>Purity</b>	Purified anti-serum
<b>Storage</b>	Store at 4°C
<b>Storage buffer</b>	Before use, vial should be resuspended in 50 µL 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
<b>Material safety datasheet</b>	<a href="#">Download MSDS</a>

# Protocols

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<b>Immunocytochemistry(ICC)</b>	Dilute at 1:200-1:2000. Perform heat antigen retrieval (pH=6) before initiating IHC staining protocol on paraffin-embedded and frozen sections
<b>Immunohistochemistry (IHC)</b>	Dilute at 1:100-1:1000 on paraffin-embedded and frozen sections. Perform heat antigen retrieval and incubate with fluorescent secondary antibody conjugate.
<b>Immunohistofluorescence (IHF)</b>	Dilute at 1:100-1:1000 on paraffin-embedded and frozen sections. Perform heat antigen retrieval and incubate with fluorescent secondary antibody conjugate.
<b>Comments</b>	Optimal working dilutions must be determined by the end-user
<b>Restrictions</b>	For research use only

# References

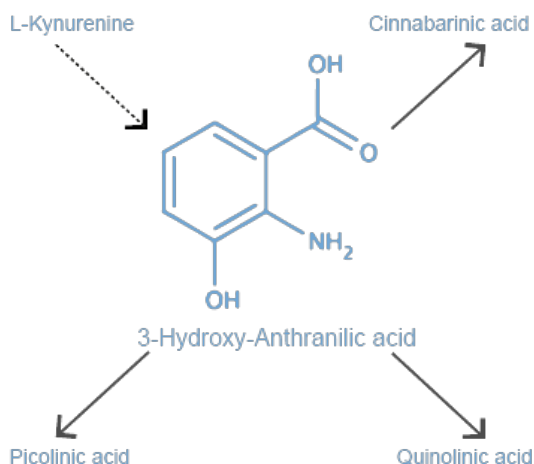
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Antibody not yet cited. Submit an article and [get a 10% discount](#).

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-HydroxyAnthranilic acid (3-HAA)

Amino acid L-Tryptophan is either degraded by 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. The kynurenine pathway of tryptophan catabolism has been extensively studied for its role in immune regulation. Described as a specific inhibitor of PDK1 kinase activity, 3-hydroxyanthranilic acid (3HAA) is known for its immunosuppressive effects. Demonstrated to exert beneficial anti-inflammatory effects in the context of neuroinflammatory disorders, the metabolite may also suppress anti-tumor immunity in humans, thus promoting cancer progression.

## Affinity & specificity of 3-Hydroxy-Anthranilic acid antibody

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

Anti-3-HydroxyAnthranilic pAb (Rabbit)

