

## Datasheet: AHP1879

<b>Description:</b>	SHEEP ANTI RAT TYROSINE HYDROXYLASE
<b>Specificity:</b>	TYROSINE HYDROXYLASE
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	0.1 ml

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			■	
Immunohistology - Frozen	■			1/1000
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation			■	
Western Blotting	■			1/1000
Immunofluorescence	■			1/1000

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Rat
<b>Species Cross Reactivity</b>	<p>Reacts with: Rabbit</p> <p>Based on sequence similarity, is expected to react with: Mammals</p> <p><b>N.B.</b> Antibody reactivity and working conditions may vary between species.</p>
<b>Product Form</b>	Purified IgG - liquid
<b>Antiserum Preparation</b>	Antisera to tyrosine hydroxylase were raised by repeated immunisations of sheep with highly purified antigen. Purified IgG prepared by immunoaffinity chromatography.
<b>Buffer Solution</b>	10mM HEPES pH7.5, 150mM NaCl
<b>Preservative</b>	0.05% Sodium Azide (NaN <sub>3</sub> )
<b>Stabilisers</b>	0.01% Bovine Serum Albumin 50% Glycerol
<b>Immunogen</b>	Rat Tyrosine hydroxylase purified from pheochromocytoma.

**External Database  
Links**

**UniProt:**

[P04177](#) [Related reagents](#)

**Entrez Gene:**

[25085](#) Th [Related reagents](#)

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**Specificity**

**Sheep anti Rat tyrosine hydroxylase antibody** recognizes rat tyrosine 3-monoxygenase, also known as tyrosine hydroxylase or tyrosine 3-hydroxylase. Tyrosine hydroxylase is a 497 amino acid ~56 kDa enzyme involved in the production of dopamine from L-tyrosine. Tyrosine hydroxylase also catalyzes the rate-limiting step in the biosynthetic pathway of the catecholamines norepinephrine, and epinephrine. The enzyme exists as a tetramer, with each subunit composed of an N-terminal regulatory domain and a C-terminal catalytic domain. Tyrosine hydroxylase is regularly used as a marker for dopaminergic neurons.

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**Western Blotting**

AHP1879 detects a band of approximately 60kDa in rat caudate cell lysates.

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**References**

1. Xu, Z.Q. *et al.* (1998) Immunohistochemical studies on phosphorylation of tyrosine hydroxylase in central catecholamine neurons using site- and phosphorylation state-specific antibodies. [Neuroscience. 82 \(3\): 727-38.](#)
2. Olivas, A. *et al.* (2016) Myocardial Infarction Causes Transient Cholinergic Transdifferentiation of Cardiac Sympathetic Nerves via gp130. [J Neurosci. 36 \(2\): 479-88.](#)

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**Storage**

Store at +4°C or at -20°C if preferred.  
Storage in frost-free freezers is not recommended.  
This product should be stored undiluted.  
Avoid repeated freezing and thawing as this may denature the antibody.  
Should this product contain a precipitate we recommend microcentrifugation before use.

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**Shelf Life**

18 months from date of despatch.

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**Health And Safety  
Information**

Material Safety Datasheet documentation #10088 available at:  
10088: <https://www.bio-rad-antibodies.com/uploads/MSDS/10088.pdf>

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Sheep IgG (H/L) (5184-2304...) [Biotin](#)

Donkey Anti Sheep IgG (STAR88...) [DyLight®488](#), [DyLight®549](#), [DyLight®649](#),  
[FITC](#), [HRP](#)

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