

## Datasheet: AHP1706

<b>Description:</b>	RABBIT ANTI HUMAN CD279
<b>Specificity:</b>	CD279
<b>Other names:</b>	PD-1
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	0.1 mg

## 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
Immunohistology - Paraffin (1)	▪			5.0ug/ml
Western Blotting	▪			0.5 - 1.0ug/ml

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.

**(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.**

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	<p>Reacts with: Mouse, Rat</p> <p><b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
<b>Product Form</b>	Purified IgG - liquid
<b>Antiserum Preparation</b>	Antisera to Human CD279 were raised by repeated immunisation of rabbits with highly purified antigen. Purified IgG prepared from whole serum by affinity chromatography.
<b>Buffer Solution</b>	Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.02% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>Immunogen</b>	A peptide corresponding to a 16 amino acid sequence from near the centre of Human CD279.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q15116</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">5133</a>    PDCD1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	PD1
<b>RRID</b>	AB_2159158
<b>Specificity</b>	<p><b>Rabbit anti Human CD279 antibody</b> detects CD279, a co-stimulatory molecule also known as programmed cell death-1 (PD-1). CD279 is a single-pass type 1 membrane protein belonging to the CD28 family, and functions mainly as a negative regulator of T-cell activation. CD279 has two specific ligands; CD274 (PD-L1) and CD273 (PD-L2), and their interaction is key in the balance between stimulatory and inhibitory signals needed for effective immune responses to microbes and self-tolerance. CD279 is inducibly expressed by T-cells, B-cells, NK-T-cells and monocytes upon activation. Loss of CD279 function has been associated with a number of autoimmune diseases, including rheumatoid arthritis, type I diabetes and ankylosing spondylitis. CD279 may be targeted therapeutically in the treatment of HIV infection to reduce T-cell exhaustion (<a href="#">Freeman <i>et al.</i> 2006</a>).</p>
<b>Histology Positive Control Tissue</b>	Human brain tissue
<b>Western Blotting</b>	AHP1706 detects a band of approximately 45kDa in THP-1 cell lysate
<b>Further Reading</b>	<ol style="list-style-type: none"> <li>Ishida, Y. <i>et al.</i> (1992) Induced expression of PD-1, a novel member of the immunoglobulin gene superfamily, upon programmed cell death. <a href="#">EMBO J. 11 (11): 3887-95.</a></li> <li>Zhong, X. <i>et al.</i> (2004) Suppression of expression and function of negative immune regulator PD-1 by certain pattern recognition and cytokine receptor signals associated with immune system danger. <a href="#">Int Immunol. 16 (8): 1181-8.</a></li> <li>Nishimura, H. <i>et al.</i> (1999) Development of lupus-like autoimmune diseases by the disruption of the PD-1 gene encoding an ITIM motif-carrying immunoreceptor. <a href="#">Immunity 11:141-51.</a></li> </ol>
<b>Storage</b>	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for

short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/AHP1706">https://www.bio-rad-antibodies.com/SDS/AHP1706</a> 10040
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR54...) [HRP](#)

### Recommended Useful Reagents

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)

[TidyBlot WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)  
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