

Datasheet: AHP1781

**BATCH NUMBER 151103**

<b>Description:</b>	GOAT ANTI HUMAN DEFENSIN ALPHA 1
<b>Specificity:</b>	DEFENSIN ALPHA 1
<b>Other names:</b>	HNP-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
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			0.5 - 2.0ug/ml
Immunoprecipitation			▪	
Western Blotting	▪			0.1 - 0.2ug/ml
Functional Assays	▪			0.4 - 0.6ug/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.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - lyophilised
<b>Reconstitution</b>	<p>Reconstitute with 0.1ml distilled water</p> <p>Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution.</p> <p>For long term storage the addition of 0.09% sodium azide is recommended.</p> <p>N.B. For functional studies do not add sodium azide</p>

**Antiserum Preparation** Antiserum to human defensin- $\alpha$ -1 was raised by repeated immunisation of goats with

highly purified antigen. Purified IgG was prepared by affinity chromatography.

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	None present
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml after reconstitution
<b>Immunogen</b>	<a href="#">Recombinant human defensin-<math>\alpha</math>-1</a>
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P59665</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">1667</a> DEFA1 <a href="#">Related reagents</a>
<b>Synonyms</b>	DEF1, DEFA2, MRS
<b>RRID</b>	AB_2091687
<b>Specificity</b>	<p><b>Goat anti Human defensin <math>\alpha</math>-1 antibody</b> recognizes defensin alpha 1, otherwise known as HNP-1 or neutrophil defensin 1. Defensin <math>\alpha</math>-1 is a secreted cationic antimicrobial peptide and member of the alpha-defensin family, which plays an important role in the innate immune response against microbial infections.</p> <p>Synovial fluid defensin <math>\alpha</math>-1 levels act as a biomarker for the evaluation of periprosthetic joint infection, a significant cause of morbidity and burden following prosthetic joint replacement (<a href="#">Li et al. 2017</a>).</p>
<b>ELISA</b>	This purified goat anti human defensin- $\alpha$ -1 antibody may be used in an indirect ELISA or as the capture reagent in a sandwich ELISA with <a href="#">recombinant human defensin-<math>\alpha</math>-1</a> (PHP208) as the standard.
<b>Western Blotting</b>	This purified goat anti human defensin- $\alpha$ -1 antibody may be used in Western Blotting applications under either reducing or non-reducing conditions with <a href="#">recombinant human defensin-<math>\alpha</math>-1</a> (PHP208) as the positive control.
<b>References</b>	<ol style="list-style-type: none"><li>1. Castañeda-Delgado, J.E. <i>et al.</i> (2014) Tuberculin skin test and interferon-gamma release assay values are associated with antimicrobial peptides expression in polymorphonuclear cells during latent tuberculous infection. <a href="#">Mem Inst Oswaldo Cruz. 109: 330-4.</a></li><li>2. Alard, J.E. <i>et al.</i> (2015) Recruitment of classical monocytes can be inhibited by disturbing heteromers of neutrophil HNP1 and platelet CCL5. <a href="#">Sci Transl Med. 7 (317): 317ra196.</a></li></ol>

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**Storage** Prior to reconstitution store at -20°C.  
After reconstitution store at -20°C.

This product should be stored undiluted. Storage in frost-free freezers is not recommended. 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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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10162 available at:  
<https://www.bio-rad-antibodies.com/SDS/AHP1781>  
10162

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Goat IgG (Fc) (STAR122...) [FITC](#), [HRP](#)

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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://www.bio-rad-antibodies.com/datasheets)

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