

Datasheet: AHP849

**BATCH NUMBER 165990**

<b>Description:</b>	GOAT ANTI HUMAN DEFENSIN BETA 2
<b>Specificity:</b>	DEFENSIN BETA 2
<b>Other names:</b>	BD-2
<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 - Paraffin	▪			
ELISA	▪			0.5 - 2.0ug/ml
Immunoprecipitation			▪	
Western Blotting	▪			0.1 - 0.2ug/ml
Immunofluorescence			▪	
Functional Assays	▪			5.0 - 8.0ug/ml

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

**Target Species** Human

**Product Form** Purified IgG - lyophilized

**Reconstitution** Reconstitute with 1.0ml distilled water  
 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. For long term storage the addition of 0.09% sodium azide is recommended.  
 N.B. For functional studies do not add sodium azide

**Preparation** Antisera to human Defensin beta 2 were 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 0.1 mg/ml after reconstitution
<b>Immunogen</b>	<a href="#">Recombinant human Defensin beta-2</a> (PHP161).
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">O15263</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">1673</a> DEFB4A <a href="#">Related reagents</a>
<b>Synonyms</b>	DEFB102, DEFB2, DEFB4
<b>RRID</b>	AB_566948
<b>Specificity</b>	<p><b>Goat anti Human Defensin beta 2 polyclonal antibody</b> recognizes human Defensin beta-2 (BD-2), a ~4.3kDa <a href="#">cationic antimicrobial peptide</a>, also known as Beta-defensin 4A or Skin-antimicrobial peptide 1 (SAP-1) expressed primarily by epithelial cells of the respiratory tract and skin, and an important component of the innate immune response against microbial infections.</p> <p>Expression of BD-2 is induced during inflammation in response to bacterial products and cytokines, and is initially expressed in a precursor form, which is cleaved to release the C-Terminal active portion of the protein which is secreted by the neutrophil and binds to <a href="#">bacterial membranes</a> causing their disruption.</p>
<b>ELISA</b>	This purified human BD-2 antibody may be used in an indirect ELISA or as the capture reagent in a sandwich ELISA with a <a href="#">biotinylated human BD-2 antibody</a> (AHP849B) as the detection reagent and <a href="#">recombinant human BD-2</a> (PHP161) as the standard
<b>Western Blotting</b>	This purified human BD-2 antibody may be used in Western Blotting applications under either reducing or non-reducing conditions with <a href="#">recombinant human BD-2</a> (PHP161) as the positive control.
<b>References</b>	1. Crack, L.R. <i>et al.</i> (2012) Human antimicrobial peptides LL-37 and human $\beta$ -defensin-2 reduce viral replication in keratinocytes infected with varicella zoster virus. <a href="#">Clin Exp Dermatol. 37 (5): 534-43.</a>
<b>Further Reading</b>	1. Bals, R. <i>et al.</i> (1998) Human beta-defensin 2 is a salt-sensitive peptide antibiotic

expressed in human lung. [J Clin Invest. 102 \(5\): 874-80.](#)

2. Harder, J. *et al.* (2000) Mucoid *Pseudomonas aeruginosa*, TNF-alpha, and IL-1beta, but not IL-6, induce human beta-defensin-2 in respiratory epithelia. [Am J Respir Cell Mol Biol. 22 \(6\): 714-21.](#)

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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 #10294 available at: <https://www.bio-rad-antibodies.com/SDS/AHP849>  
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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](#)

### Recommended Useful Reagents

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

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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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