

## Datasheet: AHP849

**BATCH NUMBER 151691**

<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.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - lyophilised
<b>Reconstitution</b>	<p>Reconstitute with 1.0ml 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. 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>
<b>Preparation</b>	Antisera to human Defensin beta 2 were raised by repeated immunisation of goats with

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

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml after reconstitution
Immunogen	<a href="#">Recombinant human Defensin beta-2</a> (PHP161).
External Database Links	<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>
Synonyms	DEFB102, DEFB2, DEFB4
RRID	AB_566948
Specificity	<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>
ELISA	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
Western Blotting	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.
References	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>
Further Reading	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**

6 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/AHP849>  
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](#)

### Recommended Useful Reagents

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

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'M372568:200706'

**Printed on 23 May 2025**