

## Datasheet: AHP849B

<b>Description:</b>	GOAT ANTI HUMAN DEFENSIN BETA 2:Biotin
<b>Specificity:</b>	DEFENSIN BETA 2
<b>Other names:</b>	BD-2
<b>Format:</b>	Biotin
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	50 µg

## 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	▪			0.25 - 1.0 ug/ml
Immunoprecipitation			▪	
Western Blotting	▪			0.1 - 0.2 ug/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 conjugated to Biotin - lyophilized
<b>Reconstitution</b>	Reconstitute with 0.5 ml sterile PBS containing 0.1% bovine serum albumin 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.
<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.
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	None present

## Stabilisers

---

**Carrier Free** Yes

---

**Approx. Protein Concentrations** IgG concentration 0.1 mg/ml after reconstitution

---

**Immunogen** [Recombinant human Defensin beta-2](#) (PHP161).

---

## External Database Links

### UniProt:

[O15263](#)   [Related reagents](#)

### Entrez Gene:

[1673](#)   DEFB4A   [Related reagents](#)

---

**Synonyms** DEFB102, DEFB2, DEFB4

---

**RRID** AB\_609622

---

## Specificity

**Goat anti Human Defensin beta 2 polyclonal antibody** recognizes human Defensin beta-2 (BD-2), a ~4.3kDa [cationic antimicrobial peptide](#), 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.

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 [bacterial membranes](#) causing their disruption.

---

## ELISA

This biotinylated human DB-2 antibody may be used in a direct ELISA or as the detection reagent in a sandwich ELISA with a [purified human BD-2 antibody](#) (AHP849) as the capture reagent and [recombinant human BD-2](#) (PHP161) as the standard.

---

## Western Blotting

This biotinylated human BD-2 antibody may be used in Western Blotting applications under either reducing or non-reducing conditions with [recombinant human BD-2](#) (PHP161) as the positive control.

---

## References

1. Crack, L.R. *et al.* (2012) Human antimicrobial peptides LL-37 and human  $\beta$ -defensin-2 reduce viral replication in keratinocytes infected with varicella zoster virus. [Clin Exp Dermatol. 37 \(5\): 534-43.](#)

---

## Further Reading

1. Bals, R. *et al.* (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.](#)

---

**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.

---

**Guarantee** 12 months from date of despatch

---

**Health And Safety Information** Material Safety Datasheet documentation #10294 available at:  
<https://www.bio-rad-antibodies.com/SDS/AHP849B>  
10294

---

**Regulatory** For research purposes only

---

**North & South America** Tel: +1 800 265 7376  
Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700  
Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21  
Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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)  
'M420776:230706'

**Printed on 12 Aug 2023**

---

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)