



# Anti-Human BD-2

20150223ML



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>102-P103G</b>
Size:	100 µg
Lot. No.:	According to product label

**Preparation:** Produced from sera of goats pre-immunized with highly pure (>98%) recombinant hBD-2. Anti-hBD-2 specific antibody was purified by affinity chromatography employing immobilized hBD-2 matrix.

## Target Background

<b>Synonyms (Target):</b>	DEFB4A; BD-2; SAP1; DEFB2; DEFB4; HBD-2; DEFB-2; DEFB102
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Defensins (alpha and beta) are cationic peptides with a broad spectrum of antimicrobial activity that comprise an important arm of the innate immune system. The  $\alpha$ -defensins are distinguished from the  $\beta$ -defensins by the pairing of their three disulfide bonds. To date, six human  $\beta$ -defensins have been identified; BD-1, BD-2, BD-3, BD-4, BD-5 and BD-6.  $\beta$ -defensins are expressed on some leukocytes and at epithelial surfaces. In addition to their direct antimicrobial activities, they can act as chemoattractants towards immature dendritic cells and memory T cells. The  $\beta$ -defensin proteins are expressed as the C-terminal portion of precursors and are released by proteolytic cleavage of a signal sequence and in some cases, a propeptide sequence.  $\beta$ -defensins contain a six-cysteine motif that forms three intra-molecular disulfide bonds.

### Database References Target

<b>Protein RefSeq:</b>	NP_004933
<b>Uniprot ID:</b>	O15263
<b>mRNA RefSeq:</b>	NM_004942.2

## Product Specifications

<b>Species reactivity</b>	Human
<b>Clone/Ab feature</b>	Goat IgG
<b>Cross reactivity</b>	Human
<b>Host</b>	Goat
<b>Clonality</b>	Polyclonal Antibody
<b>Purification</b>	Antigen-affinity purified
<b>Immunogen</b>	E.coli derived Recombinant Human BD-2
<b>Formulation</b>	lyophilized from PBS
<b>Reconstitution buffer</b>	water

**Reconstitution:** Reconstitute the antibody in sterile water to a concentration of 0.1 - 1.0 mg/ml.

**Stability:** The lyophilized antibody is stable for at least 2 years from date of receipt at -20°C. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.



**AVOID REPEATED FREEZE AND THAW CYCLES!**

### Applications

**Western Blot:** To detect hBD-2 by Western Blot analysis this antibody can be used at a concentration of 0.1- 0.2 µg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant hBD-2 is 1.5-3.0 ng/lane, under either reducing or non-reducing conditions.

#### ELISA:

**Indirect:** To detect hBD-2 by indirect ELISA (using 100 µl/well antibody solution) a concentration of 0.5 - 2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of at least 0.2 - 0.4 ng/well of recombinant hBD-2.

**Sandwich:** To detect hBD-2 by sandwich ELISA (using 100 µl/well antibody solution) a concentration of 0.5 - 2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with PeproTech's Biotinylated Anti-Human BD-2 (500-P161GBt) as a detection antibody, allows the detection of at least 0.2 - 0.4 ng/well of recombinant hBD-2.

**NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!**