



Anti-Human BD-4

20180726DS



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	102-P221
Size:	100 µg
Lot. No.:	According to product label

Preparation: Produced from sera of rabbits pre-immunized with highly pure (>98%) recombinant hBD-4 (human Beta Defensin-4). Anti-Human BD-4 specific antibody was purified by affinity chromatography employing immobilized hBD-4 matrix.

Target Background

Synonyms (Target):	DEFB104A; BD-4; DEFB4; hBD-4; DEFB-4; DEFB104; DEFB104B
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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 α -defensins are distinguished from the β -defensins by the pairing of their three disulfide bonds. To date, six human β -defensins have been identified; BD-1, BD-2, BD-3, BD-4, BD-5 and BD-6. β -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 β -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. β -defensins contain a six-cysteine motif that forms three intra-molecular disulfide bonds. BD-4 is expressed in testis, stomach, uterus, neutrophils, thyroid, lung and kidney. In addition to its direct antimicrobial activities, BD-4 is chemoattractant towards human blood monocytes.

Database References Target

Protein RefSeq:	NP_525128.2
Uniprot ID:	Q8WTQ1
mRNA RefSeq:	NM_080389.2

Product Specifications

Species reactivity	Human
Clone/Ab feature	Rabbit IgG
Cross reactivity	Human
Host	Rabbit
Clonality	Polyclonal Antibody
Purification	Antigen-affinity purified
Immunogen	E.coli derived Recombinant Human BD-4
Formulation	lyophilized from PBS
Reconstitution buffer	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 5 years from date of receipt at -20°C to -80°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 to -80°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

Western Blot: To detect human BD-4 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 human BD-4 is 1.5 - 3.0 ng/lane, under either reducing or non-reducing conditions.

Sandwich ELISA: To detect human BD-4 by sandwich ELISA (using 100 µl/well) a concentration of 0.5 - 2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with an appropriate secondary conjugated antibody, allows the detection of at least 0.2 - 0.4 ng/well of recombinant human BD-4.

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