

## Product datasheet

### Human BD-3 ELISA Kit ab272471

Recombinant SimpleStep ELISA

[4 Images](#)

#### Overview

**Product name** Human BD-3 ELISA Kit

**Detection method** Colorimetric

#### Precision

Intra-assay

Sample	n	Mean	SD	CV%
Serum	8			2.4%

Inter-assay

Sample	n	Mean	SD	CV%
Serum	3			3.8%

**Sample type** Serum, Cit plasma

**Assay type** Sandwich (quantitative)

**Sensitivity** 14.3 pg/ml

**Range** 31.25 pg/ml - 2000 pg/ml

#### Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	97	92% - 100%
Cit plasma	95	91% - 99%

**Assay time** 1h 30m

**Assay duration** One step assay

**Species reactivity** **Reacts with:** Human

#### Product overview

Human BD-3 ELISA kit (ab272471) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Human BD-3 protein in serum and plasma. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human BD-3 with 14.3 pg/mL sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate ([ab203359](#)) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

**Notes** Defensins are cysteine rich cationic peptides known to exhibit strong antimicrobial and immune signaling activities. BD-3, encoded by the *DEFB103A* gene, is expressed in many epithelial cells and induced by cytokines or microbial stimuli. Studies shows that BD-3 may play an important role in the innate epithelial defense and wound healing.

**Platform** Pre-coated microplate (12 x 8 well strips)

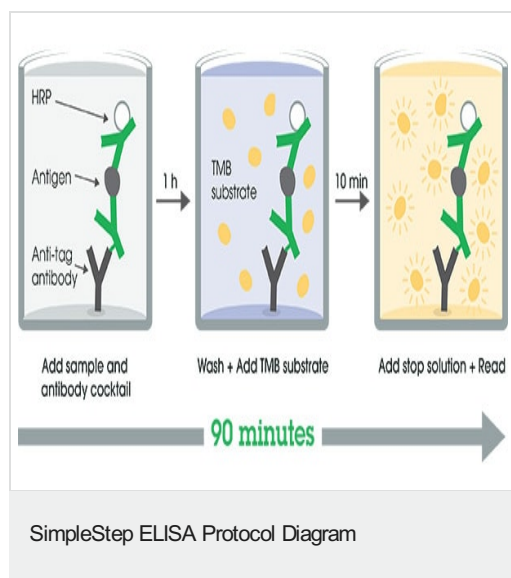
## Properties

**Storage instructions** Store at +4°C. Please refer to protocols.

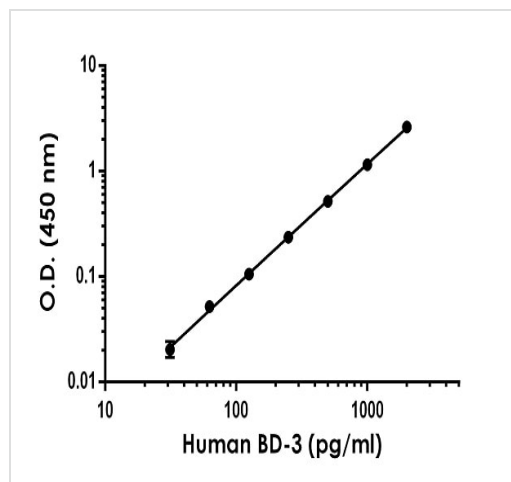
Components	1 x 96 tests
10X Human BD-3 Capture Antibody	1 x 600µl
10X Human BD-3 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent CPI - HAMA Blocker (ab193969)	1 x 6ml
Human BD-3 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

<b>Function</b>	Exhibits antimicrobial activity against Gram-positive bacteria <i>S.aureus</i> and <i>S.pyogenes</i> , Gram-negative bacteria <i>P.aeruginosa</i> and <i>E.coli</i> and the yeast <i>C.albicans</i> . Kills multiresistant <i>S.aureus</i> and vancomycin-resistant <i>E.faecium</i> . No significant hemolytic activity was observed.
<b>Tissue specificity</b>	Highly expressed in skin and tonsils, and to a lesser extent in trachea, uterus, kidney, thymus, adenoid, pharynx and tongue. Low expression in salivary gland, bone marrow, colon, stomach, polyp and larynx. No expression in small intestine.
<b>Sequence similarities</b>	Belongs to the beta-defensin family.
<b>Cellular localization</b>	Secreted.

## Images

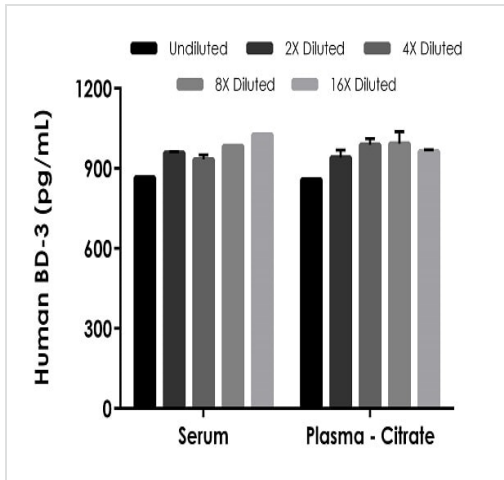


SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



The BD-3 standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean  $\pm$  SD) are graphed.

Example of human BD-3 standard curve in Sample Diluent NS.



Interpolated concentration of spike BD-3 in human serum and plasma samples.

The concentration of BD-3 were measured in duplicates, interpolated from the BD-3 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 12.5% and plasma (citrate) 12.5%. The interpolated values are plotted (mean +/- SD, n=2).

Powered by recombinant antibodies

- Research with confidence**  
Consistent and reproducible results
- Long-term and scalable supply**  
Recombinant technology
- Success from the first experiment**  
Confirmed specificity
- Ethical standards compliant**  
Animal-free production

Sandwich ELISA - Human BD-3 ELISA Kit (ab272471)

To learn more about the advantages of recombinant antibodies see [here](#).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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