

Datasheet for ABIN5068171  
**beta Defensin 1 ELISA Kit**



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## Overview

Quantity: 96 tests

Target: beta Defensin 1 (DEFB1)

Reactivity: Human

Application: ELISA

## Product Details

Sample Type: Lung, Media, Tissue Samples, Blood, Kidney, Cartilage, Amniotic Fluid, Cervicovaginal Secretions, Serum, Skin, Muscle, Saliva, Milk

Detection Method: Colorimetric

Sensitivity: 25 pg/mL

Characteristics: Beta Defensin 1, Human, ELISA Kit (Beta-defensin 1, BD-1, hBD-1, Defensin, beta 1, DEFB1, BD1, HBD1)

Components:

- Microtiter Strips 1x96 wells coated with Human BD1 AB
- Standard 800pg/ml 3x1vial
- Ab (Biotin), 100X 1x150ul
- Streptavidin (HRP), 100X 1x150ul
- Sample Diluent, 20X 1x10ml
- Wash Solution, 100X 1x10ml
- TMB Substrate 1x12ml
- Stop Solution (1% O4) 1x12ml

## Target Details

Target: beta Defensin 1 (DEFB1)

## Target Details

Alternative Name: Beta Defensin 1 ([DEFB1 Products](#))

Background: Defensins are cationic, anti-microbial peptides, produced by many cell types (e.g., leukocytes, epithelium, dendrites), and which play prominent roles in the innate immune response of mammals. Two classes described in humans, the alpha- and beta-defensins, range from 3.5 to 4.5kD and are stabilized by three intramolecular disulfide bonds differing by the ordering of the disulfide bonds in the mature peptides. To date, six alpha-defensins (also referred to as Human Neutrophil Peptides, HNP1-6) and six beta-defensins (HBD1-6) have been investigated. All have demonstrated broad-spectrum in vitro antimicrobial activity against bacteria, fungi and enveloped viruses - activities that are expected to be significant for in vivo protection against pathogens. Researchers have also investigated the ability of defensins to induce the release from tissues of cytokines and chemokines involved in inflammatory responses, thereby providing a regulatory role that bridges innate and adaptive immunity. Investigative research has led to the measurement of defensins in serum, saliva, milk, amniotic fluid and lung and cervicovaginal lavage, and culture media of cells and tissue of blood, lung, skin, bowel, muscle, cartilage and kidney, among other sample types.

## Application Details

Plate: Pre-coated

Protocol: Principle:

- The Human Beta Defensin 1 ELISA kit is based on the binding of Human Beta Defensin 1 in samples to two antibodies, one immobilized on the microtiter wells, and the other conjugated to biotin, which then binds to a streptavidin horseradish peroxidase (HRP) conjugate. After a washing step, chromogenic substrate is added and color is developed by the enzymatic reaction of HRP on the TMB substrate, which is directly proportional to the amount of BD-1 present in the sample. Stopping Solution is added to terminate the reaction, and absorbance at 450nm is then measured using an ELISA microtiter well reader. The concentration of BD-1 in samples is calculated from a standard curve of purified recombinant human BD-1 of designated concentration.

Restrictions: For Research Use only

## Handling

Storage: 4 °C

Storage Comment: 4°C