ARG80902
Human BD-4 / beta Defensin-4 ELISA kit

Package: 96 wells
Store at: 4°C

Summary

Product Description	ARG80902 Human BD-4 / beta Defensin-4 ELISA kit is a Enzyme Immunoassay kit for the quantification of Human BD-4 / beta Defensin-4 in Serum, Plasma, Cell culture supernatants
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	No significant cross-reactivity or interference with BD-1 (36 aa), BD-1 (47 aa), BD-2, BD-3.
Target Name	BD4 / beta Defensin 4
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm
Sensitivity	0.8 pg/ml
Sample Type	Serum, Plasma, Cell culture supernatants
Standard Range	1.56 - 100 pg/ml
Sample Volume	100 µl
Precision	CV: less than10%
Alternate Names	DEFB-4; hBD-4; Defensin, beta 104; Beta-defensin 104; DEFB4; BD-4; Beta-defensin 4; DEFB104

Application Instructions

Assay Time	4 hours

Properties

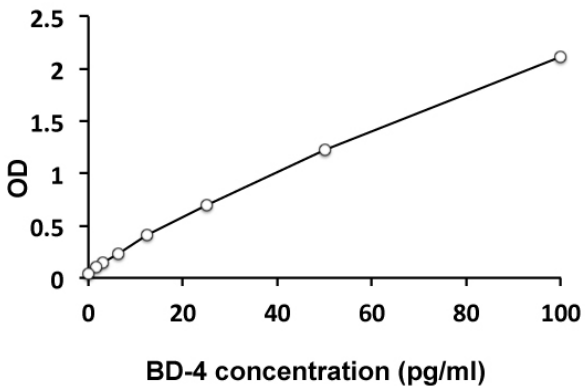
Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	DEFB104A
Gene Full Name	defensin, beta 104A
Background	Defensins are 2-6 kDa, cationic, microbicidal peptides active against many Gram-negative and Gram-positive bacteria, fungi, and enveloped viruses [PMID: 8528769], containing three pairs of intramolecular disulphide bonds. On the basis of their size and pattern of disulphide bonding, mammalian defensins are classified into alpha, beta and theta categories. Every mammalian species explored thus far has beta-defensins. In cows, as many as 13 beta-defensins exist in neutrophils. However, in other species, beta-defensins are more often produced by epithelial cells lining various

	organs (e.g. the epidermis, bronchial tree and genitourinary tract). Defensins are produced constitutively and/or in response to microbial products or proinflammatory cytokines. Some defensins are also called corticostatins (CS) because they inhibit corticotropin-stimulated corticosteroid production. The mechanism(s) by which microorganisms are killed and/or inactivated by defensins is not understood completely. However, it is generally believed that killing is a consequence of disruption of the microbial membrane. The polar topology of defensins, with spatially separated charged and hydrophobic regions, allows them to insert themselves into the phospholipid membranes so that their hydrophobic regions are buried within the lipid membrane interior and their charged (mostly cationic) regions interact with anionic phospholipid head groups and water. Subsequently, some defensins can aggregate to form `channel-like' pores; others might bind to and cover the microbial membrane in a `carpet-like' manner. The net outcome is the disruption of membrane integrity and function, which ultimately leads to the lysis of microorganisms. Some defensins are synthesised as propeptides which may be relevant to this process. [provide by Interpro: IPR006080]
Function	Has antimicrobial activity. Synergistic effects with lysozyme and DEFB103. [UniProt]
Highlight	Related products: beta Defensin4 antibodies; beta Defensin4 ELISA Kits; Related news: New MMP7 (total or active) ELISA kits are released New ELISA data calculation tool: Simplify the ELISA analysis by GainData
Research Area	Immune System kit; Microbiology and Infectious Disease kit

Images



ARG80902 Human BD-4 / beta Defensin-4 ELISA kit standard curve image

ARG80902 Human BD-4 / beta Defensin-4 ELISA kit results of a typical standard run with optical density reading at 450 nm.