Recombinant Human Beta-Defensin 4 (DEFB104A)

Cat No:HR2R1189

For research use only

Overview

Quantity	20 ?g
Gene Symbol	DEFB104A
Gene ID	140596
Accession	Q8WTQ1
Alternative Name	BD-4, DEFB-4, hBD-4, Defensin, beta 104, DEFB104, DEFB4, DEFB104A
Species	Human
Source	E. coli
Description	Defensins are a large family of peptides of which two groups exist in mammals: alpha defensins and beta defensins - which are distinguishable by the spacing and connectivity of the conserved cysteine residues within the mature peptides. It is thought that the function of defensins in the eradication of pathogens from the host system is to insert themselves into the bacterial membrane under the influence of membrane potential, in doing so forms channels which lead to leakage of cytoplasmic molecules and cell death. Unlike hBD-1, this second peptide, human beta-defensin-2 (hBD-2), is regulated at a transcriptional level in response to contact with microorganisms, and is highly effective in killing the gram negative bacteria Its expression is also upregulated by the cytokine tumor necrosis factor-alpha.
Functions	The ED(50) was determined by its ability to chemoattract immature human dendritic cells using a concentration range of 1-50 ng/mL.
Formulation	Recombinant Human Beta Defensin-4 was lyophilized from 0.2 ?m filtered 100 mM NaCl, 20 mM PB, pH 7.4.
Solubility	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Appearance	Lyophilized Powder
Molecular Weight	6
Purity	>95% as determined by SDS-PAGE
Concentration	<1.0 EU/?g of recombinant protein as determined by the LAL method.
Shipping Condition	Ambient Temperature
Storage Condition	The lyophilized protein is stable for at least one year from date of receipt at -70?C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8?C for one month, or at -20?C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.