Recombinant Human Beta-Defensin 1 (DEFB1)

Cat No:HR2R1182

For research use only

Overview

Quantity	1.0 ?g
Gene Symbol	DEFB1
Gene ID	1672
Accession	P60022
Alternative Name	Defensin, beta 1, DEFB1, BD-1, hBD-1
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 form channels which lead to leakage of cytoplasmic molecules and cell death. Human beta-defensin-1, which has 36 amino acids, was originally isolated from hemofiltrates of patients with advanced renal failure. The BD-1 gene is expressed mainly in the urogenital tract and, to a lesser degree, in trachea and lung, BD-1 is believed to function in the antimicrobial defense of the urogenital and respiratory tracts.
Functions	The ED(50) was Determined by its ability to chemoattract CD34+ dendritic cells using a concentration range of 0.1-1.0 ug/mL.
Formulation	Recombinant Human beta Defensin-1 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	4.2
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.