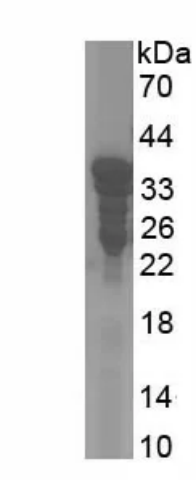
Active Defensin Beta 2 (DEFb2)

Catalog#:PXH12113

概述（Summary）

别称（Alternative Names）	B-DF2; DEFB2; BD2; DEF-B2; HBD2; DEFB102; HBD-2; SAP1; DEFB4A; DEFB4; Skin-Antimicrobial Peptide 1
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Gly24-Pro64】
Accession #	O15263
表达宿主（Host）	-
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	34.3 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Exhibits antimicrobial activity against Gram-negative bacteria and Gram-positive bacteria. May act as a ligand for C-C chemokine receptor CCR6. Can bind to both human and mouse CCR6 and induce chemotactic activity of CCR6-expressing cells.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

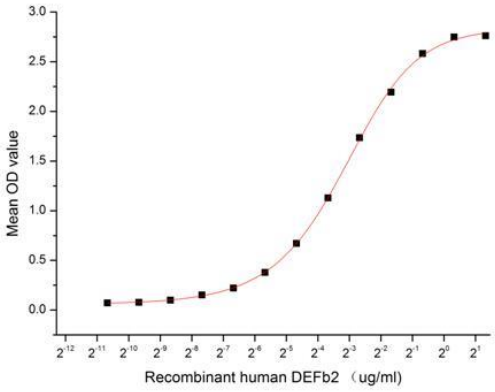


Figure 1. The binding activity of DEFb2 and TLR4

Defensin Beta 2 (DEFb2) is a 7 kDa secreted protein. It exhibits antimicrobial activity against Gram-negative bacteria and Gram-positive bacteria, with highest activity against Gram-negative bacteria. Antimicrobial activity against P.aruginosa seems to be salt-sensitive and is reduced with high salt concentrations greater than 25 mM. The human DEFb2 cDNA encodes a 64 aa protein with a 23 aa signal sequence and a 41 aa mature sequence. Besides, Toll Like Receptor 4 (TLR4) has been identified as an interactor of DEFb2, thus a binding ELISA assay was conducted to detect the interaction of recombinant human DEFb2 and recombinant human TLR4. Briefly, DEFb2 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100µl were then transferred to TLR4-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-DEFb2 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37℃, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50µL stop solution to the wells and read at 450/630nm immediately. The binding activity of DEFb2 and TLR4 was shown in Figure 1, the EC50 for this effect is 0.11 ug/mL.

注意事项（Note）

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