Active Recombinant Human DEFB4A protein, His-GST-tagged

Cat. No. DEFB4A-632H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human DEFB4A protein(O15263)(24~64 aa), fused with N-terminal His tag and GST tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	24-64 aa
Form	Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Bio-activity	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°C. 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

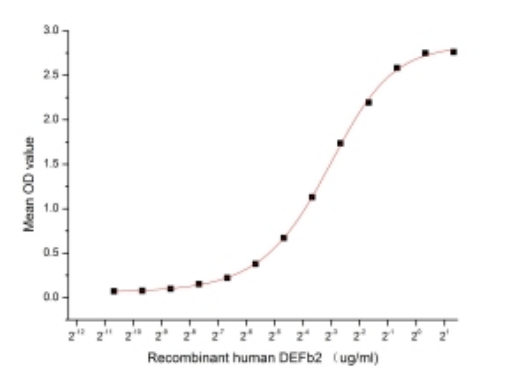
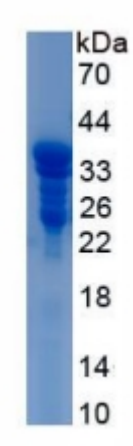
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	for 1h at 37°C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50μ stop solution to the wells and read at 450/630nm immediately. The binding activity of DEFb2 and TLR4 was shown, the EC50 for this effect is 0.11 ug/mL.
Molecular Mass	34.3kDa
Endotoxin	<1.0EU per 1μg (determined by the LAL method).
Purity	> 90% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	DEFB4A defensin, beta 4A [Homo sapiens]
Official Symbol	DEFB4A
Synonyms	DEFB4A; defensin, beta 4A; DEFB2, DEFB4, DEFB102, defensin, beta 2, defensin, beta 4; beta-defensin 4A; DEFB 2; HBD 2; SAP1; defensin, beta 2; defensin, beta 4; skin-antimicrobial peptide 1; BD-2; DEFB2; DEFB4; HBD-2; DEFB-2; DEFB102;
Gene ID	1673
mRNA Refseq	NM_004942

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Protein Refseq	NP_004933
MIM	602215
UniProt ID	O15263
Activity	
SDS-PAGE	

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA