

β-defensin 111 (Q-12): sc-137428

BACKGROUND

β-defensins (also designated BDs, or hBDs in human) are small cationic peptides with broad-spectrum antimicrobial activity against a variety of enveloped viruses, fungi and bacteria. Produced in mucosal epithelia and neutrophils of several species, β-defensins are developmentally regulated. The family of β-defensin proteins share a common defensin-motif that is characterized by multiple cysteine residues and a highly conserved tertiary structure. Besides playing a significant role in host immune defense, many β-defensins also are involved in sperm maturation and capacitation. β-defensin 111, also known as DEFB-10, DEFB-11 or DEFB110, is a 67 amino acid secreted protein belonging to the β-defensin family. Existing as two alternatively spliced isoforms and encoded by a gene located on human chromosome 6, β-defensin 111 is thought to have antibacterial activity.

REFERENCES

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4. Crovella, S., et al. 2005. Primate β-defensins—structure, function and evolution. *Curr. Protein Pept. Sci.* 6: 7-21.
5. Patil, A.A., et al. 2005. Cross-species analysis of the mammalian β-defensin gene family: presence of syntenic gene clusters and preferential expression in the male reproductive tract. *Physiol. Genomics* 23: 5-17.
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CHROMOSOMAL LOCATION

Genetic locus: DEFB110 (human) mapping to 6p12.3.

SOURCE

β-defensin 111 (Q-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of β-defensin 111 of human origin.

PRODUCT

Each vial contains 100 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137428 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

β-defensin 111 (Q-12) is recommended for detection of β-defensin 111 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other β-defensin family members.

Suitable for use as control antibody for β-defensin 111 siRNA (h): sc-95070, β-defensin 111 shRNA Plasmid (h): sc-95070-SH and β-defensin 111 shRNA (h) Lentiviral Particles: sc-95070-V.

Molecular Weight of β-defensin 111 isoforms: 8 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.