SANTA CRUZ BIOTECHNOLOGY, INC.

β-defensin 6 (C-11): sc-70051

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 6, also known as BD6, DEFB106 (defensin, β 106), DEFB106B, DEFB106A or DEFB6, is a 65 amino acid secreted protein that is expressed specifically in epididymis, lung and skeletal muscle. It is suggested that β-defensin 6 may be a novel mediator of inflammatory tissue injury.

REFERENCES

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8. Yamaguchi, Y., et al. 2007. β-defensin overexpression induces progressive muscle degeneration in mice. Am. J. Physiol., Cell Physiol. 292: C2141-C2149.
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CHROMOSOMAL LOCATION

Genetic locus: DEFB106B (human) mapping to 8p23.1.

SOURCE

β-defensin 6 (C-11) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of β-defensin 6 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-70051 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

β-defensin 6 (C-11) is recommended for detection of β-defensin 6 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for β-defensin 6 siRNA (h): sc-77130, β-defensin 6 shRNA Plasmid (h): sc-77130-SH and β-defensin 6 shRNA (h) Lentiviral Particles: sc-77130-V.

Molecular Weight of β-defensin 6: 7 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (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.

PROTOCOLS

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