SANTA CRUZ BIOTECHNOLOGY, INC.

Keratin 37 (C-14): sc-137541



The Power to Question

BACKGROUND

The Keratin multi-gene family is made of "soft" epithelial cytokeratins and "hard" hair Keratins. While the epithelial cytokeratins are involved in the layering and formation of epithelia, the hair Keratins are responsible for creating nails and hair. There are two types of Keratins: the acidic class I Keratin proteins and the basic/neutral class II Keratin proteins. Keratin 37, also known as HA7, KRTHA7 or hHa7, is a 499 amino acid protein that is a member of the type I acidic class of the Keratin family 36 and forms a heterodimer with type II Keratins. The gene encoding Keratin 37 maps to human chromosome 17. Two key tumor suppressor genes are associated with chromosome 17, name-Iy, p53 and BRCA1. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, and is liked to predisposition of cancers of the ovary, colon, prostate gland and fallopian tubes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KRT37 (human) mapping to 17q21.2.

SOURCE

Keratin 37 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Keratin 37 of human origin.

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-137541 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Keratin 37 (C-14) is recommended for detection of Keratin 37 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); non cross-reactive with other Keratin family members.

Suitable for use as control antibody for Keratin 37 siRNA (h): sc-93991, Keratin 37 shRNA Plasmid (h): sc-93991-SH and Keratin 37 shRNA (h) Lentiviral Particles: sc-93991-V.

Molecular Weight of Keratin 37: 50 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) Immunofluo-rescence: 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, **D0 N0T 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.