SANTA CRUZ BIOTECHNOLOGY, INC.

Cytokeratin 23 (Y-14): sc-164140

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The Power to Question

BACKGROUND

Cytokeratins comprise a diverse group of intermediate filament proteins that are expressed in both keratinized and non-keratinized epithelial tissue. The cytokeratin proteins play a critical role in differentiation, as well as tissue specialization and function, and maintenance of the overall structural integrity of epithelial cells. There are two types of cytokeratins, namely the type I cytokeratins and the type II cytokeratins. Cytokeratin 23, also known as KRT23, K23, CK23 or HAIK1, is a 422 amino acid intermediate filament protein that functions as a heterotetramer that is composed of two type I and two type II cytokeratins. Characteristic of most Cytokeratins, Cytokeratin 23 is thought to participate in maintaining the structural integrity of a variety of cells. Cytokeratin 23 expression is induced in pancreatic cancer cells, suggesting a possible role in carcinogenesis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KRT23 (human) mapping to 17q21.2; Krt23 (mouse) mapping to 11 D.

SOURCE

Cytokeratin 23 (Y-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Cytokeratin 23 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-164140 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Cytokeratin 23 (Y-14) is recommended for detection of Cytokeratin 23 of mouse, rat and 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 Cytokeratin family members.

Suitable for use as control antibody for Cytokeratin 23 siRNA (h): sc-94056, Cytokeratin 23 siRNA (m): sc-142763, Cytokeratin 23 shRNA Plasmid (h): sc-94056-SH, Cytokeratin 23 shRNA Plasmid (m): sc-142763-SH, Cytokeratin 23 shRNA (h) Lentiviral Particles: sc-94056-V and Cytokeratin 23 shRNA (m) Lentiviral Particles: sc-142763-V.

Positive Controls: HeLa nuclear extract: sc-2120 or HeLa whole cell lysate: sc-2200.

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.