



Basal cell cytokeratin (RCK103)

CATALOG NUMBER: MUB0312P
CLONE: RCK103
SPECIES / ISOTYPE: mouse IgG1
PRODUCT FORM: purified monoclonal antibody

BACKGROUND

Cytokeratins are a subfamily of intermediate filament proteins and are characterized by a remarkable biochemical diversity, represented in human epithelial tissues by at least 20 different polypeptides. They range in molecular weight between 40 kDa and 68 kDa and isoelectric pH between 4.9 – 7.8. The individual human cytokeratins are numbered 1 to 20.

The various epithelia in the human body usually express cytokeratins which are not only characteristic of the type of epithelium, but also related to the degree of maturation or differentiation within an epithelium.

Cytokeratin subtype expression patterns are used to an increasing extent in the distinction of different types of epithelial malignancies. The cytokeratin antibodies are not only of assistance in the differential diagnosis of tumors using immunohistochemistry on tissue sections, but are also a useful tool in cytopathology and flow cytometric assays.

SOURCE

RCK103 is a mouse monoclonal IgG1 antibody derived by fusion of SP2/0-Ag14 mouse myeloma cells with spleen cells from a mouse immunized with a mix of cell preparations containing human cytokeratins.

PRODUCT

Each vial contains 100 µl 1 mg/ml purified monoclonal antibody in PBS containing 0.09% sodium azide.

SPECIFICITY

RCK103 is a cytokeratin antibody recognizing (amongst others) cytokeratin 5. This monoclonal antibody stains basal cells in combined and stratified epithelial tissues. It recognizes the stem cell population, including the so-called amplifying cells in the prostate epithelium.

Species reactivity: human, quail, chicken, rat, rabbit, hamster, canine, swine and guinea pig.

RCK103 is useful for immunoblotting, immunocytochemistry, immunohistochemistry on

frozen tissues and flow cytometry. Optimal antibody dilution should be determined by titration; recommended range is 1:100 – 1:200 for flow cytometry, and for immunohistochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent, and 1:100 – 1:1000 for immunoblotting applications.

STORAGE

Store at 4°C, or in small aliquots at –20°C.

REFERENCES

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WARNING and CAUTION

This product is intended FOR RESEARCH USE ONLY, and FOR TESTS IN VITRO, not for use in diagnostic or therapeutic procedures involving humans or animals.

This product contains sodium azide. To prevent formation of toxic vapors, do not mix with strong acidic solutions. To prevent formation of potentially explosive metallic azides in metal plumbing, always wash into drain with copious quantities of water.

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