

Cytokeratin 5/14 (16.4): sc-58733

BACKGROUND

Cytokeratins are a subfamily of intermediate filament keratins that are characterized by a remarkable biochemical diversity, which is represented in human epithelial tissues by at least 20 different polypeptides. Cytokeratins range in isoelectric range between 4.9 and 7.8. Cytokeratin 1 has the highest molecular weight, while Cytokeratin 19 has the lowest molecular weight. The cytokeratins are divided into the type I and type II subgroups. Type II family members comprise the basic to neutral members, Cytokeratins 1-8, while the type I group comprises the acidic members, Cytokeratins 9-20. Various epithelia in the human body usually express cytokeratins which are characteristic of the type of epithelium and related to the degree of maturation or differentiation within said epithelium. Cytokeratin subtype expression patterns are used to an increasing extent in the distinction of different types of epithelial malignancies. Cytokeratin 4 is expressed in differentiated layers of the mucosal and esophageal epithelia along with Cytokeratin 13.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KRT5 (human) mapping to 12q13.13, KRT14 (human) mapping to 17q21.2.

SOURCE

Cytokeratin 5/14 (16.4) is a mouse monoclonal antibody raised against cytokeratin enriched extract of tongue epithelium of cat origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Cytokeratin 5/14 (16.4) is available conjugated to either phycoerythrin (sc-58733 PE) or fluorescein (sc-58733 FITC), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

Cytokeratin 5/14 (16.4) is recommended for detection of Cytokeratin 5/14 of human and feline origin by flow cytometry (1 µg per 1 x 10⁶ cells).

Molecular Weight of Cytokeratin 5/14: 58/50 kDa.

SELECT PRODUCT CITATIONS

1. Liang, Y., Chen, G., Yang, Y., Li, Z., Chen, T., Sun, W., Yu, M., Pan, K., Guo, W. and Tian, W. 2019. Effect of canonical NFκB signaling pathway on the differentiation of rat dental epithelial stem cells. *Stem Cell Res. Ther.* 10: 139.
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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 for detailed protocols and support products.



See **Cytokeratin 14 (LL001): sc-53253** for Cytokeratin 14 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor[®] 488, 546, 594, 647, 680 and 790.