

Cytokeratin 15/18 (LC18N): sc-53254

BACKGROUND

Cytokeratins comprise a diverse group of intermediate filament proteins (IFPs) that are expressed as pairs in both keratinized and non-keratinized epithelial tissue. Cytokeratins play a critical role in differentiation and tissue specialization and function to maintain the overall structural integrity of epithelial cells. Cytokeratins are useful markers of tissue differentiation and, therefore, the characterization of malignant tumors. Cytokeratin 15 is an intermediate filament (IF) type I protein that is responsible for the mechanical integrity of epithelial cells. Cytokeratin 15 is a specific marker of stem cells of the hair-follicle bulge and may be a useful marker for diagnosis between basal cell carcinoma and trichoepithelioma. Cytokeratin 18 is involved in keratin organization and distribution. Phosphorylation of Ser 18 of Cytokeratin 18 is essential for its association with 14-3-3 proteins. Cytokeratin 18 is expressed in a majority of adenocarcinomas and basal cell carcinomas.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KRT15 (human) mapping to 17q21.2, KRT18 (human) mapping to 12q13.13.

SOURCE

Cytokeratin 15/18 (LC18N) is a mouse monoclonal antibody raised against an N-terminal synthetic peptide of Cytokeratin 18 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Cytokeratin 15/18 (LC18N) is recommended for detection of Cytokeratin 15/18 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of Cytokeratin 15: 52 kDa.

Molecular Weight of Cytokeratin 18: 45 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201.

SELECT PRODUCT CITATIONS

1. Ma, X., Chen, S., Jin, W. and Gao, Y. 2017. Th1/Th2 PB balance and CD200 expression of patients with active severe alopecia areata. *Exp. Ther. Med.* 13: 2883-2887.

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 18 (RGE53): sc-32329** for Cytokeratin 18 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor[®] 488, 546, 594, 647, 680 and 790.