

Cytokeratin 18 (h): 293T Lysate: sc-174503

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 have been found to be useful markers of tissue differentiation, which is directly applicable to the characterization of malignant tumors. For example, Cytokeratins 10 and 13 are highly expressed in a subset of squamous cell carcinomas while Cytokeratin 18 is expressed in a majority of adenocarcinomas and basal cell carcinomas. Cytokeratin 18 contains two major phosphorylation sites, Ser 33 and Ser 52. Phosphorylation of Ser 18 is essential for the association of Cytokeratin 18 with 14-3-3 proteins and is involved in keratin organization and distribution.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KRT18 (human) mapping to 12q13.13.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

Cytokeratin 18 (h): 293T Lysate represents a lysate of human Cytokeratin 18 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Cytokeratin 18 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Cytokeratin 18 antibodies. Recommended use: 10-20 µl per lane.

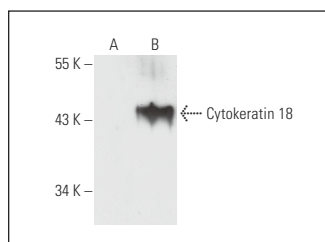
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Cytokeratin 5/6/18 (LP34): sc-53262 is recommended as a positive control antibody for Western Blot analysis of enhanced human Cytokeratin 18 expression in Cytokeratin 18 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Cytokeratin 5/6/18 (LP34): sc-53262. Western blot analysis of Cytokeratin 18 expression in non-transfected: sc-110760 (A) and human Cytokeratin 18 transfected: sc-110494 (B) 293 whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.