

Cytokeratin 5 (m): 293T Lysate: sc-119619

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. Cytokeratin 5 is expressed in normal basal cells. Mutations of the Cytokeratin 5 gene (KRT5) have been shown to result in the autosomal dominant disorder epidermolysis bullosa (EB).

REFERENCES

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2. Silen, A., et al. 1994. Evaluation of a new tumor marker for Cytokeratin 8 and 18 fragments in healthy individuals and prostate cancer patients. *Prostate* 24: 326-332.
3. Marceau, N., et al. 1995. Cytokeratin expression, fibrillar organization and subtle function in liver cells. *Biochem. Cell Biol.* 73: 619-625.
4. Quillien, V., et al. 1995. Serum and tissue distribution of a fragment of Cytokeratin 19 (CYFRA 21-1) in lung cancer patients. *Anticancer Res.* 15: 2857-2863.
5. Silen, A., et al. 1995. A novel IRMA and ELISA for quantifying Cytokeratin 8 and 18 fragments in the sera of healthy individuals and cancer patients. *Scand. J. Clin. Lab. Invest.* 55: 153-161.
6. Stephens, K., et al. 1995. Epidermolysis bullosa simplex: a Keratin 5 mutation is a fully dominant allele in epidermal cytoskeleton function. *Am. J. Hum. Genet.* 56: 577-585.
7. Mukhopadhyay, T., et al. 1996. Functional inactivation of p53 by antisense RNA induces invasive ability of lung carcinoma cells and downregulates Cytokeratin synthesis. *Anticancer Res.* 16: 1683-1689.

CHROMOSOMAL LOCATION

Genetic locus: Krt5 (mouse) mapping to 15 F2.

PRODUCT

Cytokeratin 5 (m): 293T Lysate represents a lysate of mouse Cytokeratin 5 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

Cytokeratin 5 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Cytokeratin 5 antibodies. Recommended use: 10-20 µl per lane.

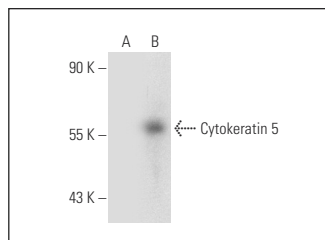
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Cytokeratin 5 (3E2F1): sc-81702 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Cytokeratin 5 expression in Cytokeratin 5 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 (3E2F1): sc-81702. Western blot analysis of Cytokeratin 5 expression in non-transfected: sc-117752 (A) and mouse Cytokeratin 5 transfected: sc-119619 (B) 293T whole cell lysates.

RESEARCH USE

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