

Cytokeratin 5 (XM26): sc-58732

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

1. van der Velden, L.A., et al. 1993. Cytokeratin expression in normal and (pre)malignant head and neck epithelia: an overview. *Head Neck* 15: 133-146.
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. *Scan. 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.

CHROMOSOMAL LOCATION

Genetic locus: KRT5 (human) mapping to 12q13.13.

SOURCE

Cytokeratin 5 (XM26) is a mouse monoclonal antibody raised against a recombinant protein corresponding to 103 amino acids of the C-terminal region of Cytokeratin 5 of human origin.

PRODUCT

Each vial contains 250 µl culture supernatant containing IgG₁ with < 0.1% sodium azide.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

APPLICATIONS

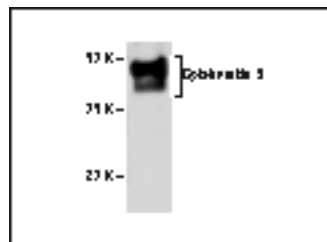
Cytokeratin 5 (XM26) is recommended for detection of Cytokeratin 5 of human origin by Western Blotting (starting dilution to be determined by researcher, dilution range to be determined by researcher), immunoprecipitation [1-2 µl per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution to be determined by researcher, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution to be determined by researcher, dilution range 1:50-1:500).

Suitable for use as control antibody for Cytokeratin 5 siRNA (h): sc-35153; and as shRNA Plasmid control antibody for Cytokeratin 5 shRNA Plasmid (h): sc-35153-SH.

Molecular Weight of Cytokeratin 5: 58 kDa.

Positive Controls: DU 145 cell lysate: sc-2268, MCF7 whole cell lysate: sc-2206 or HeLa whole cell lysate: sc-2200.

DATA



Cytokeratin 5 (XM26) sc-58732. Western Blotting of Human DU145 Cell Lysate.

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 5 (RCK103): sc-32721** for Cytokeratin 5 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.