Cytokeratin 5/8 (RCK102): sc-32328

**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 tumor 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). Cytokeratin 8 expression is seen in epithelium and epithelium-derived tumors. Cytokeratins 10 and 13 are expressed highly in a subset of squamous cell carcinomas while Cytokeratin 18 is expressed in a majority of adenocarcinomas and basal cell carcinomas.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: KRT5 (human) mapping to 12q13.13, KRT8 (human) mapping to 12q13.13; KRT5 (mouse) mapping to 15 F2, KRT8 (mouse) mapping to 15 F3.

**SOURCE**

Cytokeratin 5/8 (RCK102) is a mouse monoclonal antibody raised against the human lung cancer cell line, MR21.

**PRODUCT**

Each vial contains 200 µg IgG kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Cytokeratin 5/8 (RCK102) is available conjugated to either phycoerythrin (sc-32328 PE) or fluorescein (sc-32328 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

**APPLICATIONS**

Cytokeratin 5/8 (RCK102) is recommended for detection of Cytokeratin 5 and Cytokeratin 8 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (start-ing dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells); may cross-react with Cytokeratin 18.

Molecular Weight of Cytokeratin 5: 58 kDa.
Molecular Weight of Cytokeratin 8: 55 kDa.
Positive Controls: HeLa whole cell lysate: sc-2200, MCF7 whole cell lysate: sc-2206 or Hep G2 cell lysate: sc-2227.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

Cytokeratin 5/8 (RCK102): sc-32328. Western blot analysis of Cytokeratin 5/8 expression in Hep G2 (A), HeLa (B), MCF7 (C) and SK-BR-3 (D) whole cell lysates. Detection reagent used: m-IgG1 kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Cytokeratin 5/8 (RCK102): sc-32328. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tumor (A) and immunofluorescence staining of methanol fixed HeLa cells (B) showing cytoskeletal localization.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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