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 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). 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.

**CHROMOSOMAL LOCATION**

Genetic locus: KRT5/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 WB (RGB), 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 (starting 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 10^6 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.

**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.