Cytokeratin 5/8 (C50): sc-8021

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

SOURCE
Cytokeratin 5/8 (C50) is a mouse monoclonal antibody raised against cytoskeletal preparation of HeLa cells.

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

Cytokeratin 5/8 (C50) is available conjugated to either phycoerythrin (sc-8021 PE) or Alexa Fluor® 488 (sc-8021 AF488) or Alexa Fluor® 647 (sc-8021 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

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

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

APPLICATIONS
Cytokeratin 5/8 (C50) is recommended for detection of Cytokeratin 5/8 of 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), flow cytometry (1 µg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with Cytokeratin 18.

Molecular Weight of Cytokeratin 5: 58 kDa.
Molecular Weight of Cytokeratin 8: 55 kDa.
Positive Controls: MCF7 whole cell lysate: sc-2206, A549 cell lysate: sc-2413 or Hep G2 cell lysate: sc-2227.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended:

DATA

SELECT PRODUCT CITATIONS

PROTOCOLS
See our website at www.scbt.com for detailed protocols and support products.

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