pan-Cytokeratin (C11): sc-8018

**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. For example, 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**


**SOURCE**

pan-Cytokeratin (C11) is a mouse monoclonal antibody raised against keratin-enriched epidermoid carcinoma cell line A-431 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

pan-Cytokeratin (C11) is available conjugated to agarose (sc-8018 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-8018 HRP), 200 µg/ml, for WB, IHC (P) and ELISA; to either phycoerythrin (sc-8018 PE), fluorescein (sc-8018 FITC), Alexa Fluor® 488 (sc-8018 AF488), Alexa Fluor® 546 (sc-8018 AF546), Alexa Fluor® 594 (sc-8018 AF594) or Alexa Fluor® 647 (sc-8018 AF647), 200 µg/ml, for WB (RGB), IF, IHC (P) and FCM; and to either Alexa Fluor® 680 (sc-8018 AF680) or Alexa Fluor® 790 (sc-8018 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

pan-Cytokeratin (C11) is recommended for detection of Cytokeratin 4, 5, 6, 8, 10, 13 and 18 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:10000), 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 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of pan-Cytokeratin: 40-59 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, HeLa whole cell lysate: sc-2200 or A549 cell lysate: sc-2413.

**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.

**DATA**

pan-Cytokeratin (C11): sc-8018 HRP. Direct western blot analysis of pan-Cytokeratin expression in A-431 (A), MCF7 (B), HeLa (C), A549 (D) and A549 (E) whole cell lysates.

pan-Cytokeratin (C11) HRP: sc-8018 HRP. Direct immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing cytoplasmic staining of keratinocytes (A). pan-Cytokeratin (C11): sc-8018. Immunofluorescence staining of methanol-fixed A-431 cells showing cytoskeletal fluorescent immunostaining of cytokeratin proteins. Note also nuclear rhodamine immunostaining with p53 (FL-393) sc-6243 (B).

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

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