**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**


**CHROMOSOMAL LOCATION**

Genetic locus: KRT10 (human) mapping to 17q21; Krt10 (mouse) mapping to 11 D.

**SOURCE**

pan-Cytokeratin (AE1/AE3) is a mouse monoclonal antibody raised against epidermal keratins of human origin.

**PRODUCT**

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

**APPLICATIONS**

pan-Cytokeratin (AE1/AE3) is recommended for detection of most acidic (type I) and basic (type II) Cytokeratins of mouse, rat, human, cow, and rabbit 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of pan-Cytokeratin: 45-59 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, A-431 whole cell lysate: sc-2201 or HeLa whole cell lysate: sc-2200.

**DATA**

pan-Cytokeratin (AE1/AE3): sc-81714. Western blot analysis of pan-Cytokeratin expression in HeLa whole cell lysate.

pan-Cytokeratin: sc-81714. Immunofluorescence staining of methanol-fixed HeLa cells showing cytokeratin localization.

**PROTOCOLS**

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