**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. Cytokeratins 10 and 13 are present in the cytoskeletal region of a subset of squamous cell carcinomas. Cytokeratin 10 is a heterotetramer of two type I and two type II keratins, is generally associated with keratin 1, and is seen in all suprabasal cell layers including stratum corneum.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: KRT10 (human) mapping to 17q21.2; Krt10 (mouse) mapping to 11 D.

**SOURCE**

Cytokeratin 10 (4A27) is a mouse monoclonal antibody raised against cytokeratins from the human epidermis.

**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.

**STORAGE**

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

**APPLICATIONS**

Cytokeratin 10 (4A27) is recommended for detection of Cytokeratin 10 of mouse, rat, human and canine origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1,000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Cytokeratin 10 siRNA (h): sc-35149, Cytokeratin 10 siRNA (m): sc-35150, Cytokeratin 10 shRNA Plasmid (h): sc-35149-SH, Cytokeratin 10 shRNA Plasmid (m): sc-35150-SH, Cytokeratin 10 shRNA (h) Lentiviral Particles: sc-35149-V and Cytokeratin 10 shRNA (m) Lentiviral Particles: sc-35150-V.

Molecular Weight of Cytokeratin 10: 57 kDa.

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

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**PROTOCOLS**

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