**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.

**CHROMOSOMAL LOCATION**

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

**SOURCE**

Cytokeratin 10 (RKSE60) is a mouse monoclonal antibody raised against Cytokeratins from the human epidermis.

**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.

Cytokeratin 10 (RKSE60) is available conjugated to agarose (sc-23877 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-23877 HRP), 200 μg/ml, for WB, IHC(PE) and ELISA; to either phycocerythrin (sc-23877 PE), fluorescein (sc-23877 FITC), Alexa Fluor® 488 (sc-23877 AF488), Alexa Fluor® 546 (sc-23877 AF546), Alexa Fluor® 594 (sc-23877 AF594) or Alexa Fluor® 647 (sc-23877 AF647), 200 μg/ml, for WB (RGB), IF, IHC(PE) and FCM; and to either Alexa Fluor® 680 (sc-23877 AF680) or Alexa Fluor® 790 (sc-23877 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

Cytokeratin 10 (RKSE60) is recommended for detection of Cytokeratin 10 of mouse, rat and human 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)], 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).

Cytokeratin 10 (RKSE60) is also recommended for detection of Cytokeratin 10 in additional species, including canine.

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: C32 whole cell lysate: sc-2205, A-431 whole cell lysate: sc-2201 or HeLa whole cell lysate: sc-2200.

**STORAGE**

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

**DATA**

Cytokeratin 10 (RKSE60): sc-23877. Western blot analysis of Cytokeratin 10 expression in rat skin tissue extract.

Cytokeratin 10 (RKSE60): sc-23877. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human skin tissue showing cytoplasmic staining of keratinocytes and Langerhans cells (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded rat skin tissue showing cytoplasmic staining of epithelial cells (B).

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

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