**Cytokeratin 7 (RCK105): sc-23876**

**BACKGROUND**

Cytokeratins comprise a diverse group of intermediate filament proteins (IFPs) that are expressed as pairs in both keratinized and non-keratinized epithelial tissue, where they constitute up to 85% of mature keratinocytes in the vertebrate epidermis. Cytokeratins play a critical role in differentiation and tissue specialization and function to maintain the overall structural integrity of epithelial cells. The α-helical coiled-coil dimers associate laterally end-to-end to form 10 nm diameter filaments. Cytokeratins are useful markers of tissue specialization and function to maintain the overall structural integrity of epithelial tumors. Cytokeratin 7 (also known as sarcolectin) agglutinates normal and epithelial cells. The brmte epidermis. Cytokeratins play a critical role in differentiation and, in addition, they aid in the characterization of malignant tumors. Cytokeratin 7 also inhibits the synthesis of interferon-dependent secondary proteins thus reversing the antiviral effect of interferon induction and restoring cells to their status ad primum. In normal and transformed cells, Cytokeratin 7 localizes to the membrane.

**CHROMOSOMAL LOCATION**

Genetic locus: KRT7 (human) mapping to 12q13.13; Krt7 (mouse) mapping to 15 F2.

**SOURCE**

Cytokeratin 7 (RCK105) is a mouse monoclonal antibody raised against T24 cells of human origin.

**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 7 (RCK105) is available conjugated to agarose (sc-23876AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-23876HRP), 200 µg/ml, for WB, IHC(p) and ELISA; and to either phycoerythrin (sc-23876PE), fluorescein (sc-23876FITC), Alexa Fluor® 488 (sc-23876AF488) or Alexa Fluor® 647 (sc-23876AF647), 200 µg/ml, for IF, IHC(p) and FCM. Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**APPLICATIONS**

Cytokeratin 7 (RCK105) is recommended for detection of Cytokeratin 7 of mouse, rat, human, hamster, canine and porcine origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1,000), 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for Cytokeratin 7 siRNA (h): sc-35154, Cytokeratin 7 siRNA (m): sc-35155, Cytokeratin 7 shRNA Plasmid (h): sc-35154-SH, Cytokeratin 7 shRNA Plasmid (m): sc-35155-SH, Cytokeratin 7 shRNA (h) Lentiviral Particles: sc-35154-V and Cytokeratin 7 shRNA (m) Lentiviral Particles: sc-35155-V.

Molecular Weight of Cytokeratin 7: 54 kDa.

Positive Controls: RIN-m5F whole cell lysate: sc-364792, MDCK cell lysate: sc-2252 or Hep G2 cell lysate: sc-2227.

**DATA**

<table>
<thead>
<tr>
<th>Molecular Weight</th>
<th>Cytokeratin 7</th>
<th>Cytokeratin 7 (RCK105): sc-23876. Western blot analysis of Cytokeratin 7 expression in Hep G2 (A), RIN-m5F (B) and MDCK (C) whole cell lysates.</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 K – 91 K – 50 K</td>
<td>Cytokeratin 7</td>
<td>Cytokeratin 7 (RCK105): sc-23876. Immunoperoxidase staining of formalin fixed, paraffin-embedded human salivary gland tissue showing cytoplasmic and membrane staining of glandular cells (A). Immunofluorescence staining of methanol-fixed Hela cells showing cytoskeletal localization (B).</td>
</tr>
</tbody>
</table>

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**STORAGE**

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