

Cytokeratin 17 (V-17): sc-101931

BACKGROUND

Cytokeratin 17 is a member of the cytokeratin subfamily of intermediate filament proteins (IFPs). It is unique in that it is normally expressed in the basal cells of complex epithelia but not in stratified or simple epithelia. Cytokeratin 17 contains 432 amino acids and is expressed in the nail bed, hair follicle, sebaceous glands and other epidermal appendages. Cytokeratin 17 functions to regulate cell growth and size through its interactions with the adaptor protein 14-3-3- α to mediate protein synthesis. Mutations in the gene encoding for Cytokeratin 17 lead to depressed protein translation and smaller sized skin keratinocytes, corresponding to decreased Akt/mTOR signaling activity. Cytokeratin 17 may be a useful marker for cervical stem cell identification, squamous cell carcinoma of the larynx, respiratory syncytial virus and transitional cell carcinomas of the human urinary tract.

REFERENCES

- Guelstein, V.I., et al. 1993. Immunohistochemical localization of Cytokeratin 17 in transitional cell carcinomas of the human urinary tract. *Virchows Arch., B, Cell Pathol.* 64: 1-5.
- Troyanovsky, S.M. and Leube, R.E. 1994. Activation of the silent human Cytokeratin 17 pseudogene-promoter region by cryptic enhancer elements of the Cytokeratin 17 gene. *Eur. J. Biochem.* 225: 61-69.

CHROMOSOMAL LOCATION

Genetic locus: KRT17 (human) mapping to 17q21.2; Krt17 (mouse) mapping to 11 D.

SOURCE

Cytokeratin 17 (V-17) is a purified rabbit polyclonal antibody raised against Cytokeratin 17 of human origin.

PRODUCT

Each vial contains 50 μ g IgG in 500 μ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

Cytokeratin 17 (V-17) is recommended for detection of Cytokeratin 17 of mouse, rat, human and dog origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Cytokeratin 17 siRNA (h): sc-43311, Cytokeratin 17 siRNA (m): sc-43312, Cytokeratin 17 shRNA Plasmid (h): sc-43311-SH, Cytokeratin 17 shRNA Plasmid (m): sc-43312-SH, Cytokeratin 17 shRNA (h) Lentiviral Particles: sc-43311-V and Cytokeratin 17 shRNA (m) Lentiviral Particles: sc-43312-V.

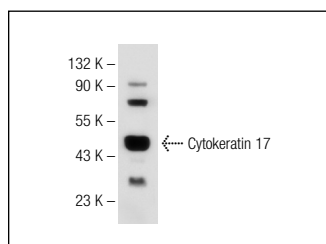
Molecular Weight of Cytokeratin 17: 46 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, A-431 whole cell lysate: sc-2201 or T24 cell lysate: sc-2292.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz[™]: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Cytokeratin 17 (V-17): sc-101931. Western blot analysis of Cytokeratin 17 expression in T24 whole cell lysate.

SELECT PRODUCT CITATIONS

- Attia, J., et al. 2011. Modulation of collagen and keratin synthesis in co-cultures of fibroblasts and keratinocytes on hyaluronan-coated polysulfone membranes. *J. Bioactive Compatible Polymers* 26: 71-88.

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.

PROTOCOLS

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



Try **Cytokeratin 17 (E-4): sc-393002** or **Cytokeratin 17 (D-4): sc-393091**, our highly recommended monoclonal alternatives to Cytokeratin 17 (V-17).