

Cytokeratin 16 (H-46): sc-134730

BACKGROUND

Cytokeratins comprise a diverse group of intermediate filament proteins that are expressed as pairs in both keratinized and non-keratinized epithelial tissue. The cytokeratin proteins play a critical role in differentiation, as well as tissue specialization and function, to maintain the overall structural integrity of epithelial cells. Cytokeratins are also useful markers in identifying the origin of metastatic tumors. Cytokeratin 16 is expressed in benign stratified squamous epithelium and squamous cell carcinoma of the head and neck, as well as luminal cells of mammary gland and sweat ducts. It is absent in noninvasive breast carcinomas and normal breast tissue. Mutations in the Cytokeratin 16 gene cause various diseases, including pachyonychia congenita type 1 (PC1), nonepidermolytic palmoplantar keratoderma (NEPPK) and unilateral palmoplantar verrucous nevus (UPVN).

REFERENCES

1. Wetzels, R.H., et al. 1991. Basal cell-specific and hyperproliferation-related keratins in human breast cancer. *Am. J. Pathol.* 138: 751-763.
2. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 600962. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: KRT16 (human) mapping to 17q21.2; Krt16 (mouse) mapping to 11 D.

SOURCE

Cytokeratin 16 (H-46) is a rabbit polyclonal antibody raised against amino acids 428-473 mapping at the C-terminus of Cytokeratin 16 of human origin.

PRODUCT

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

APPLICATIONS

Cytokeratin 16 (H-46) is recommended for detection of Cytokeratin 16 of human and, to a lesser extent, mouse and rat 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), 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 16 siRNA (h): sc-60498, Cytokeratin 16 siRNA (m): sc-60499, Cytokeratin 16 shRNA Plasmid (h): sc-60498-SH, Cytokeratin 16 shRNA Plasmid (m): sc-60499-SH, Cytokeratin 16 shRNA (h) Lentiviral Particles: sc-60498-V and Cytokeratin 16 shRNA (m) Lentiviral Particles: sc-60499-V.

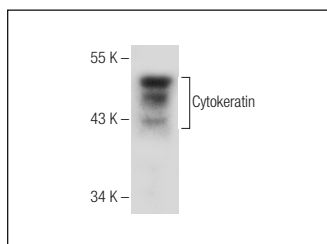
Molecular Weight of Cytokeratin 16: 48 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

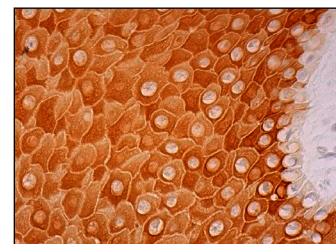
RECOMMENDED SECONDARY REAGENTS

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 16 (H-46): sc-134730. Western blot analysis of Cytokeratin human hair protein extract.



Cytokeratin 16 (H-46): sc-134730. Immunoperoxidase staining of formalin fixed, paraffin-embedded human oral mucosa tissue showing cytoplasmic staining of squamous epithelial cells.

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.



MONOS
Satisfaction
Guaranteed

Try **Cytokeratin 16 (E-10): sc-377224** or **Cytokeratin 16 (LL025): sc-53255**, our highly recommended monoclonal alternatives to Cytokeratin 16 (H-46).