Keratin 77 (N-13): sc-168302



The Power to Overtin

BACKGROUND

The Keratin multigene family is made of the "soft" epithelial cytokeratins and the "hard" hair keratins. While the epithelial cytokeratins are involved in the layering and formation of epithelia, the hair keratins are responsible for creating nails and hair. There are two types of hair keratins: the acidic type I hair keratin proteins and the basic/neutral type II hair keratin proteins. Keratin 77, also known as KRT77, K1B or KRT1B, is a 578 amino acid protein that belongs to the intermediate filament family. Exclusively expressed in luminal duct cells of eccrine sweat glands, Keratin 77 undergoes citrullination, which is a deimination of arginine residues. Keratin 77 is encoded by a gene located on human chromosome 12q13.13. Human chromosome 12 encodes over 1,100 genes within 132 million bases and makes up about 4.5% of the human genome.

REFERENCES

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- 4. Rogers, M.A., et al. 2005. Characterization of new members of the human type II keratin gene family and a general evaluation of the keratin gene domain on chromosome 12q13.13. J. Invest. Dermatol. 124: 536-544.
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- Langbein, L., et al. 2008. New concepts on the histogenesis of eccrine neoplasia from keratin expression in the normal eccrine gland, syringoma and poroma. Br. J. Dermatol. 159: 633-645.

CHROMOSOMAL LOCATION

Genetic locus: KRT77 (human) mapping to 12q13.13.

SOURCE

Keratin 77 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Keratin 77 of human origin.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

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

Blocking peptide available for competition studies, sc-168302 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Keratin 77 (N-13) is recommended for detection of Keratin 77 of human 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other Keratin family members.

Suitable for use as control antibody for Keratin 77 siRNA (h): sc-95675, Keratin 77 shRNA Plasmid (h): sc-95675-SH and Keratin 77 shRNA (h) Lentiviral Particles: sc-95675-V.

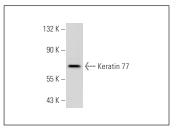
Molecular Weight of Keratin 77: 62 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Keratin 77 (N-13): sc-168302. Western blot analysis of Keratin 77 expression in Jurkat whole cell lysate.

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.