

Keratin 27 (N-13): sc-168251

BACKGROUND

Keratin 27 (K27), also known as KRT27, Cytokeratin-27 (CK-27), Keratin-25C (K25C) or KRT25C, is a 459 amino acid cytoplasmic protein that belongs to the intermediate filament family. Existing as a heterotetramer of two type I and two type II keratins, Keratin 27 interacts with Cytokeratin 6 to form filaments. Keratin 27 is essential for the formation of keratin intermediate filaments in the inner root sheath (irs), and for the proper assembly of type I and type II keratin protein complexes. Keratin 27 is strongly expressed in skin and scalp. In the hair follicle, Keratin 27 is expressed in the Henle layer, Huxley layer and in the inner root sheath cuticle of the hair follicle. Keratin 27 expression extends from the bulb region up to the point of differentiation into the three layers. In addition, Keratin 27 is present in the medulla of beard hair. The gene that encodes Keratin 27 consists of approximately 5,727 bases and maps to human chromosome 17q21.2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KRT27 (human) mapping to 17q21.2; Krt27 (mouse) mapping to 11 D.

SOURCE

Keratin 27 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Keratin 27 of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-168251 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Keratin 27 (N-13) is recommended for detection of Keratin 27 of mouse, rat and 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); may cross-react with Keratin 25.

Suitable for use as control antibody for Keratin 27 siRNA (h): sc-94041, Keratin 27 siRNA (m): sc-146408, Keratin 27 shRNA Plasmid (h): sc-94041-SH, Keratin 27 shRNA Plasmid (m): sc-146408-SH, Keratin 27 shRNA (h) Lentiviral Particles: sc-94041-V and Keratin 27 shRNA (m) Lentiviral Particles: sc-146408-V.

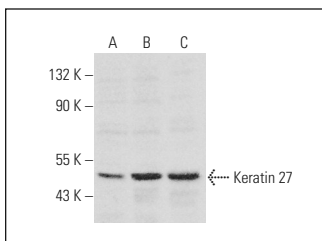
Molecular Weight of Keratin 27: 50 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, T-47D cell lysate: sc-2293 or A549 cell lysate: sc-2413.

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 27 (N-13): sc-168251. Western blot analysis of Keratin 27 expression in HeLa (A), T-47D (B) and A549 (C) whole cell lysates.

RESEARCH USE

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