

Keratin 27/28 (T-14): sc-168252

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 28 (Keratin, type I cytoskeletal 28), also known as Keratin-25D or type I inner root sheath-specific keratin-K25irs4, and Keratin 27, also known as KRT27, Cytokeratin-27 (CK-27), Keratin-25C (K25C) or KRT25C, are cytoplasmic proteins that belong to the intermediate filament family. Highly expressed in scalp and skin, Keratin 28 is found at lower levels in thymus and the medulla of beard hair. 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.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KRT27/KRT28 (human) mapping to 17q21.2; Krt27/Krt28 (mouse) mapping to 11 D.

SOURCE

Keratin 27/28 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Keratin 27 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.

Blocking peptide available for competition studies, sc-168252 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Keratin 27/28 (T-14) is recommended for detection of Keratin 27 of mouse, rat and human origin and Keratin 28 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Keratin 27/28 (T-14) is also recommended for detection of Keratin 27 and Keratin 28 in additional species, including equine, canine, bovine and porcine.

Molecular Weight of Keratin 27/28: 50/55 kDa.

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) 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.

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.