KRTAP10-10 (N-14): sc-243229



The Power to Question

BACKGROUND

Hair is a structure that is unique to mammals. It plays an important role in the retention of heat, as well as sexual dimorphism, attraction of mates and protection of skin. The major components of hair are α -keratins and keratin-associated proteins (KRTAPs or KAPs), each of which are encoded by multigene families. Hair keratins form an intermediate filament (IF) network, which is embedded in an interfilamentous matrix consisting of KRTAPs. KRTAPS comprise three major groups, which are essential for the formation of rigid and resistant hair shafts through disulfide bond cross-linking or hydrophobic interactions with keratins. These groups are designated high cysteine (HS), which includes subfamilies 1, 2, 3, 10, 12, 16, 29 and 31, ultrahigh cysteine, including subfamilies 4, 5, 9, 17, 28, 30, 32 and 33, and high glycine-tyrosine (HGT), which includes subfamilies 6, 7, 8, 19, 20 and 21. KRTAP10-10 is a 251 amino acid protein that interacts with keratins and belongs to the KRTAP type 10 family.

REFERENCES

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- 3. Langbein, L., Rogers, M.A., Winter, H., Praetzel, S., Beckhaus, U., Rackwitz, H.R. and Schweizer, J. 1999. The catalog of human hair keratins. I. Expression of the nine type I members in the hair follicle. J. Biol. Chem. 274: 19874-19884.
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- Maderson, P.F. 2003. Mammalian skin evolution: a reevaluation. Exp. Dermatol. 12: 233-236.
- 6. Shimomura, Y. and Ito, M. 2005. Human hair keratin-associated proteins. J. Investig. Dermatol. Symp. Proc. 10: 230-233.

CHROMOSOMAL LOCATION

Genetic locus: KRTAP10-10 (human) mapping to 21q22.3.

SOURCE

KRTAP10-10 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of KRTAP10-10 of human origin.

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-243229 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

KRTAP10-10 (N-14) is recommended for detection of KRTAP10-10 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 KRTAP10-5.

Suitable for use as control antibody for KRTAP10-10 siRNA (h): sc-91379, KRTAP10-10 shRNA Plasmid (h): sc-91379-SH and KRTAP10-10 shRNA (h) Lentiviral Particles: sc-91379-V.

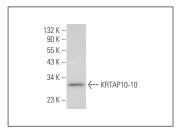
Molecular Weight of KRTAP10-10: 29 kDa.

Positive Controls: human stomach extract: sc-363780.

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



KRTAP10-10 (N-14): sc-243229. Western blot analysis of KRTAP10-10 expression in human stomach tissue extract.

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.

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