

Keratin 82 (G-13): sc-168316

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 82 (KRT82), also known as type-II Keratin Kb22, type-II hair Keratin Hb2 or KRTHB2, is a 513 amino acid protein that exists as a heterotetramer of two type I and two type II keratins. A member of the intermediate filament family, Keratin 82 is expressed in the hair cuticle and is encoded by a gene that maps to human chromosome 12q13.13. Chromosome 12 encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p.

REFERENCES

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RESEARCH USE

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

CHROMOSOMAL LOCATION

Genetic locus: KRT82 (human) mapping to 12q13.13; Krt82 (mouse) mapping to 15 F2.

SOURCE

Keratin 82 (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Keratin 82 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-168316 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Keratin 82 (G-13) is recommended for detection of Keratin 82 of mouse, rat 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); non cross-reactive with other Keratin family members.

Keratin 82 (G-13) is also recommended for detection of Keratin 82 in additional species, including equine and porcine.

Suitable for use as control antibody for Keratin 82 siRNA (h): sc-96055, Keratin 82 siRNA (m): sc-146429, Keratin 82 shRNA Plasmid (h): sc-96055-SH, Keratin 82 shRNA Plasmid (m): sc-146429-SH, Keratin 82 shRNA (h) Lentiviral Particles: sc-96055-V and Keratin 82 shRNA (m) Lentiviral Particles: sc-146429-V.

Molecular Weight of Keratin 82: 57 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.