

# Keratin 73 (T-12): sc-168285

## BACKGROUND

The Keratin multi-gene family is made of "soft" epithelial cytokeratins and "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 Keratins: the acidic class I Keratin proteins and the basic/neutral class II Keratin proteins. Keratin 73, also known as K6IRS3, KRT6IRS3 or IRT6IRS3, is a 540 amino acid protein that is a member of the basic/neutral class II Keratin protein family. Keratin 73 is expressed in scalp hair follicles, specifically within the inner root sheath (IRS), and is found in all three layers (Huxley, Henle, and cuticle) of the IRS. 2 Keratin 73 isoforms exist due to an alternate splicing event, generating isoform 2 which is a shorter 381 amino acid protein. The gene encoding Keratin 73 maps to human chromosome 12q13.13 which 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 achondrogenesis, achondrogenesis and Kniest dysplasia.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: KRT73 (human) mapping to 12q13.13.

## RESEARCH USE

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

## SOURCE

Keratin 73 (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Keratin 73 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-168285 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Keratin 73 (T-12) is recommended for detection of Keratin 73 of 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.

Suitable for use as control antibody for Keratin 73 siRNA (h): sc-95821, Keratin 73 shRNA Plasmid (h): sc-95821-SH and Keratin 73 shRNA (h) Lentiviral Particles: sc-95821-V.

Molecular Weight of Keratin 73 isoforms: 59/42 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](http://www.scbt.com) or our catalog for detailed protocols and support products.