

# Integrin $\alpha$ 10 (S-14): sc-161742

## BACKGROUND

Integrin  $\alpha$ 10 (integrin  $\alpha$ -10/ $\beta$ -1) is a member of the integrin  $\alpha$  chain family that contains seven FG-GAP repeats and one VWFA domain. Integrin  $\alpha$ 10 is single-pass type 1 membrane protein and is expressed as a hetero-dimer of an  $\alpha$  and a  $\beta$  subunit. Integrin  $\alpha$ 10 is a widely expressed protein with highest expression found in muscle and heart tissue but is also found in articular cartilage. The  $\alpha$ 10 subunit is part of a collagen type II-binding integrin found in chondrocytes. Disruption of Integrin  $\alpha$ 10 expression will lead to growth retardation and defects in the growth plate, and is characterized by a disturbed arrangement of chondrocytes, abnormal chondrocyte shape and reduced chondrocyte proliferation. AP-2 $\epsilon$  and Ets-1 have been shown to be involved in the regulation of Integrin  $\alpha$ 10 transcription in chondrocytes. Integrin  $\alpha$ 10 is upregulated in malignant melanoma cell lines.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ITGA10 (human) mapping to 1q21.1; Itga10 (mouse) mapping to 3 F2.1.

## SOURCE

Integrin  $\alpha$ 10 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of Integrin  $\alpha$ 10 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161742 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Integrin  $\alpha$ 10 (S-14) is recommended for detection of Integrin  $\alpha$ 10 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 Integrin  $\alpha$  family members.

Integrin  $\alpha$ 10 (S-14) is also recommended for detection of Integrin  $\alpha$ 10 in additional species, including equine and porcine.

Suitable for use as control antibody for Integrin  $\alpha$ 10 siRNA (h): sc-88849, Integrin  $\alpha$ 10 siRNA (m): sc-146246, Integrin  $\alpha$ 10 shRNA Plasmid (h): sc-88849-SH, Integrin  $\alpha$ 10 shRNA Plasmid (m): sc-146246-SH, Integrin  $\alpha$ 10 shRNA (h) Lentiviral Particles: sc-88849-V and Integrin  $\alpha$ 10 shRNA (m) Lentiviral Particles: sc-146246-V.

Molecular Weight of Integrin  $\alpha$ 10: 130 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](http://www.scbt.com) or our catalog for detailed protocols and support products.