

# Integrin $\alpha 8$ (T-20): sc-6601

## BACKGROUND

Integrins are heterodimers composed of noncovalently associated transmembrane  $\alpha$  and  $\beta$  subunits. In addition to mediating cell adhesion and cytoskeletal organization, integrins function as signaling receptors. Signals transduced by integrins play a role in many biological processes, including cell growth, differentiation, migration and apoptosis. Integrin  $\alpha 8$  is expressed in contractile interstitial cells and smooth muscle cells and is upregulated in lung injury. Integrin  $\alpha 8$  is also a marker for smooth muscle cells, expressed as early as  $\alpha$  smooth muscle Actin. The Integrin  $\alpha 8$  chain is expressed in the glomerulus exclusively by mesangial cells and may play an important role for maintaining tissue integrity in the glomerulus during glomerular injury.

## REFERENCES

- Hynes, R.O. 1992. Integrins: versatility, modulation, and signaling in cell adhesion. *Cell* 69: 11-25.
- Miyamoto, S., et al. 1995. Synergistic roles for receptor occupancy and aggregation in integrin transmembrane function. *Science* 267: 883-885.

## CHROMOSOMAL LOCATION

Genetic locus: ITGA8 (human) mapping to 10p13; Itga8 (mouse) mapping to 2 A1.

## SOURCE

Integrin  $\alpha 8$  (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Integrin  $\alpha 8$  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-6601 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Integrin  $\alpha 8$  (T-20) is recommended for detection of Integrin  $\alpha 8$  heavy chain of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

Integrin  $\alpha 8$  (T-20) is also recommended for detection of Integrin  $\alpha 8$  heavy chain in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Integrin  $\alpha 8$  siRNA (h): sc-35688, Integrin  $\alpha 8$  siRNA (m): sc-35689, Integrin  $\alpha 8$  shRNA Plasmid (h): sc-35688-SH, Integrin  $\alpha 8$  shRNA Plasmid (m): sc-35689-SH, Integrin  $\alpha 8$  shRNA (h) Lentiviral Particles: sc-35688-V and Integrin  $\alpha 8$  shRNA (m) Lentiviral Particles: sc-35689-V.

Molecular Weight of nonreduced Integrin  $\alpha 8$ : 180 kDa.

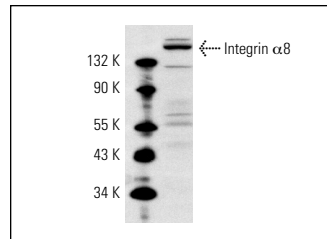
Molecular Weight of reduced Integrin  $\alpha 8$ : 155/25 kDa.

Positive Controls: Ramos cell lysate: sc-2216.

## 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



Integrin  $\alpha 8$  (T-20): sc-6601. Western blot analysis of Integrin  $\alpha 8$  expression in Ramos whole cell lysate.

## 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.

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Try **Integrin  $\alpha 8$  (F-11): sc-365798**, our highly recommended monoclonal alternative to Integrin  $\alpha 8$  (T-20).