

Integrin $\alpha 8$ (H-180): sc-25713

BACKGROUND

Integrins are heterodimers composed of noncovalently associated transmembrane α and β 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 α 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

1. Hynes, R.O. 1992. Integrins: versatility, modulation, and signaling in cell adhesion. *Cell* 69: 11-25.
2. 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 $\alpha 8$ (H-180) is a rabbit polyclonal antibody raised against amino acids 791-970 of Integrin $\alpha 8$ of human origin.

PRODUCT

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

APPLICATIONS

Integrin $\alpha 8$ (H-180) is recommended for detection of Integrin $\alpha 8$ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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 $\alpha 8$ (H-180) is also recommended for detection of Integrin $\alpha 8$ 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.

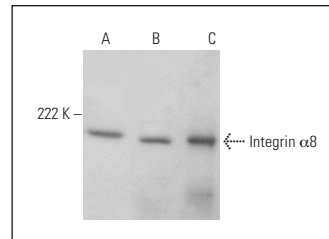
Molecular Weight of reduced Integrin $\alpha 8$: 155/25 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, human spleen extract: sc-363779 or Ramos cell lysate: sc-2216.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Integrin $\alpha 8$ (H-180): sc-25713. Western blot analysis of Integrin $\alpha 8$ expression in Ramos (A) and K-562 (B) whole cell lysates and human spleen tissue extract (C).

SELECT PRODUCT CITATIONS

1. Schordan, S., et al. 2011. αV -Integrins mediate the mechanoprotective action of osteopontin in podocytes. *Am. J. Physiol. Renal Physiol.* 300: F119-F132.

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.



Try **Integrin $\alpha 8$ (F-11): sc-365798**, our highly recommended monoclonal alternative to Integrin $\alpha 8$ (H-180).