

# Integrin $\alpha$ 11 (E-20): sc-103570

## BACKGROUND

Integrins are heterodimers composed of noncovalently associated transmembrane  $\alpha$  and  $\beta$  subunits, which heterodimerize to produce more than 20 different receptors. Most Integrin receptors bind ligands that are components of the extracellular matrix, including fibronectin, collagen (COL) and vitronectin. Certain integrins can also bind to soluble ligands, such as fibrinogen, or to counterreceptors on adjacent cells, such as the intracellular adhesion molecules (ICAMs), leading to cellular aggregation. Integrin  $\alpha$ 11, also known as ITGA11 or MSTP018, is a 1,189 amino acid single-pass type I membrane protein that contains one VWFA domain and 7 FG-GAP repeats. Expressed at high levels in heart and uterus and present at lower levels in pancreas, kidney, skeletal muscle, placenta, lung, colon and brain, Integrin  $\alpha$ 11 exists as a heterodimer with Integrin  $\beta$ 1 and functions as a receptor for collagen.

## CHROMOSOMAL LOCATION

Genetic locus: ITGA11 (human) mapping to 15q23; Itga11 (mouse) mapping to 9 B.

## SOURCE

Integrin  $\alpha$ 11 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of Integrin  $\alpha$ 11 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-103570 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

Integrin  $\alpha$ 11 (E-20) is recommended for detection of Integrin  $\alpha$ 11 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  $\alpha$ 11 (E-20) is also recommended for detection of Integrin  $\alpha$ 11 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Integrin  $\alpha$ 11 siRNA (h): sc-90047, Integrin  $\alpha$ 11 siRNA (m): sc-105578, Integrin  $\alpha$ 11 shRNA Plasmid (h): sc-90047-SH, Integrin  $\alpha$ 11 shRNA Plasmid (m): sc-105578-SH, Integrin  $\alpha$ 11 shRNA (h) Lentiviral Particles: sc-90047-V and Integrin  $\alpha$ 11 shRNA (m) Lentiviral Particles: sc-105578-V.

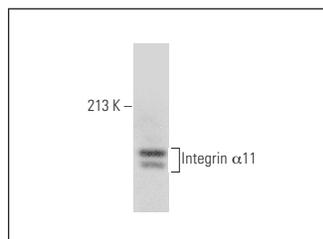
Molecular Weight of Integrin  $\alpha$ 11: 145 kDa.

Positive Controls: mouse liver extract: sc-2256.

## 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  $\alpha$ 11 (E-20): sc-103570. Western blot analysis of Integrin  $\alpha$ 11 expression in mouse liver tissue extract.

## 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.



Try **Integrin  $\alpha$ 11 (F-5): sc-390091**, our highly recommended monoclonal alternative to Integrin  $\alpha$ 11 (E-20).