# ITFG2 (T-12): sc-168217



The Power to Question

#### **BACKGROUND**

Integrins are heterodimers composed of noncovalently associated transmembrane  $\alpha$  and  $\beta$  subunits. The sixteen  $\alpha$  and eight  $\beta$  subunits 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 counter-receptors on adjacent cells such as the intracellular adhesion molecules (ICAMs), leading to aggregation of cells. Ligands serve to cross-link or cluster integrins by binding to adjacent integrin receptors; both receptor clustering and ligand occupancy are necessary for the activation of integrin-mediated responses. 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. ITFG2 (integrin-alpha FG-GAP repeat-containing protein 2) is a 447 amino acid protein that contains two FG-GAP repeats, a motif commonly found in integrin proteins.

## **REFERENCES**

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## CHROMOSOMAL LOCATION

Genetic locus: ITFG2 (human) mapping to 12p13.33; Itfg2 (mouse) mapping to 6 F3.

## **SOURCE**

ITFG2 (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ITFG2 of human origin.

#### **PRODUCT**

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

Blocking peptide available for competition studies, sc-168217 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

ITFG2 (T-12) is recommended for detection of ITFG2 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 ITFG1 or ITFG3.

ITFG2 (T-12) is also recommended for detection of ITFG2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ITFG2 siRNA (h): sc-95815, ITFG2 siRNA (m): sc-146307, ITFG2 shRNA Plasmid (h): sc-95815-SH, ITFG2 shRNA Plasmid (m): sc-146307-SH, ITFG2 shRNA (h) Lentiviral Particles: sc-95815-V and ITFG2 shRNA (m) Lentiviral Particles: sc-146307-V.

Molecular Weight of ITFG2: 49 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209.

## **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) 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 or our catalog for detailed protocols and support products.

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