# Integrin $\alpha$ E (H-260): sc-28662



The Power to Question

#### **BACKGROUND**

Integrins are heterodimers composed of noncovalently associated transmembrane  $\alpha$  and  $\beta$  subunits. The 16  $\alpha$  and 8  $\beta$  subunits heterodimerize to produce more than 20 different receptors. Most integrin receptors bind ligands that are components of the extracellular matrix, including Fibronectin, collagen 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 aggregation of cells. Ligands serve to crosslink or cluster integrins by binding to adjacent integrin receptors; both receptor clustering and ligand occupancy are necessary for the activation of integrinmediated 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.

## **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: ITGAE (human) mapping to 17p13.2; Itgae (mouse) mapping to 11 B4.

# **SOURCE**

Integrin  $\alpha E$  (H-260) is a rabbit polyclonal antibody raised against amino acids 864-1123 mapping within an extracellular domain of Integrin  $\alpha E$  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.

## **APPLICATIONS**

Integrin  $\alpha E$  (H-260) is recommended for detection of Integrin  $\alpha E$  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).

Suitable for use as control antibody for Integrin  $\alpha$ E siRNA (h): sc-35690, Integrin  $\alpha$ E siRNA (m): sc-43132, Integrin  $\alpha$ E shRNA Plasmid (h): sc-35690-SH, Integrin  $\alpha$ E shRNA Plasmid (m): sc-43132-SH, Integrin  $\alpha$ E shRNA (h) Lentiviral Particles: sc-35690-V and Integrin  $\alpha$ E shRNA (m) Lentiviral Particles: sc-43132-V.

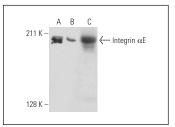
Molecular Weight of Integrin  $\alpha E$ : 150 kDa.

Positive Controls: human peripheral blood whole cell lysate, CCRF-CEM cell lysate: sc-2225 or Ca Ski whole cell lysate: sc-364360.

#### **RECOMMENDED SECONDARY REAGENTS**

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

## **DATA**



Integrin  $\alpha$ E (H-260): sc-28662. Western blot analysis of Integrin  $\alpha$ E expression in Ca Ski (A), CCRF-CEM (B) and human peripheral blood (C) whole cell lysates.

# **SELECT PRODUCT CITATIONS**

- Lau, T., et al. 2009. Monitoring mouse Serotonin transporter internalization in stem cell-derived serotonergic neurons by confocal laser scanning microscopy. Neurochem. Int. 54: 271-276.
- Kittler, K., et al. 2010. Antagonists and substrates differentially regulate Serotonin transporter cell surface expression in serotonergic neurons. Eur. J. Pharmacol. 629: 63-67.
- Silva, M.A., et al. 2012. Increased bacterial translocation in gluten-sensitive mice is independent of small intestinal paracellular permeability defect.w Dig. Dis. Sci. 57: 38-47.

## **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.



Try Integrin  $\alpha$ E (Ber-ACT8): sc-19981, our highly recommended monoclonal alternative to Integrin  $\alpha$ E (H-260).

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