

Integrin $\beta 8$ (H-160): sc-25714

BACKGROUND

Integrins are heterodimers composed of noncovalently associated transmembrane α and β subunits. The 16α and 8β 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 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.

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.
3. Clark, E.A., et al. 1995. Integrins and signal transduction pathways: the road taken. *Science* 268: 233-239.

CHROMOSOMAL LOCATION

Genetic locus: ITGB8 (human) mapping to 7p21.1; Itgb8 (mouse) mapping to 12 F2.

SOURCE

Integrin $\beta 8$ (H-160) is a rabbit polyclonal antibody raised against amino acids 610-769 of Integrin $\beta 8$ 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 $\beta 8$ (H-160) is recommended for detection of Integrin $\beta 8$ 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), immunohistochemistry (including paraffin-embedded sections) (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 $\beta 8$ (H-160) is also recommended for detection of Integrin $\beta 8$ in additional species, including equine, canine, bovine and porcine.

Molecular Weight of Integrin $\beta 8$: 97 kDa.

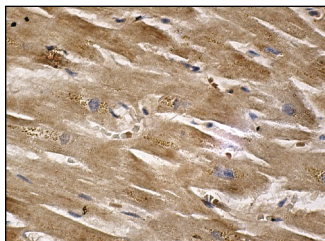
RESEARCH USE

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

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



Integrin $\beta 8$ (H-160): sc-25714. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

SELECT PRODUCT CITATIONS

1. Dummula, K., et al. 2010. Development of integrins in the vasculature of germinal matrix, cerebral cortex, and white matter of fetuses and premature infants. *J. Neurosci. Res.* 88: 1193-1204.
2. Watzlawik, J., et al. 2010. Human remyelination promoting antibody inhibits apoptotic signaling and differentiation through Lyn kinase in primary rat oligodendrocytes. *Glia* 58: 1782-1793.
3. Massuto, D.A., et al. 2010. Transforming growth factor β (TGF β) signaling is activated during porcine implantation: proposed role for latency-associated peptide interactions with integrins at the conceptus-maternal interface. *Reproduction* 139: 465-478.
4. Zhao, Y., et al. 2013. Cyp1b1 mediates periostin regulation of trabecular meshwork development by suppression of oxidative stress. *Mol. Cell. Biol.* 33: 4225-4240.
5. Shin, E.S., et al. 2014. PEDF expression regulates the proangiogenic and proinflammatory phenotype of the lung endothelium. *Am. J. Physiol. Lung Cell. Mol. Physiol.* 306: L620-L634.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Integrin 8 (E-6): sc-514150**, our highly recommended monoclonal alternative to Integrin $\beta 8$ (H-160).