# SANTA CRUZ BIOTECHNOLOGY, INC.

# ICAP-1 (L-18): sc-67916



# BACKGROUND

ICAP-1 (integrin  $\beta$ 1-binding protein 1, integrin cytoplasmic domain-associated protein 1) is a 200 amino acid protein encoded by the human gene ITGB1BP. Integrins are transmembrane heterodimeric receptors for extracellular matrix and cell surface proteins. The binding of integrins to ligands in the extracellular matrix is linked to cell attachment and spreading, which in turn activates various cytosolic signal cascades to promote cell migration, survival, proliferation and differentiation. ICAP-1 interacts with the cytoplasmic domain of integrin  $\beta$ 1 (ITGB1) to facilitate the recruitment of integrin  $\beta$ 1 to the focal contacts during integrin-dependent cell adhesion. ICAP-1 is a cytoplasmic protein that is primarily expressed in intestine, colon, testis, ovary, thymus, spleen and prostate.

# REFERENCES

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- 3. Chang, D.D., et al. 2002. Molecular basis for interaction between ICAP1  $\alpha$  PTB domain and  $\beta1$  integrin. J. Biol. Chem. 277: 8140-8145.
- 4. Calderwood, D.A., et al. 2003. Integrin  $\beta$  cytoplasmic domain interactions with phosphotyrosine-binding domains: a structural prototype for diversity in integrin signaling. Proc. Natl. Acad. Sci. USA 100: 2272-2277.
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- Zawistowski, J.S., et al. 2005. CCM1 and CCM2 protein interactions in cell signaling: implications for cerebral cavernous malformations pathogenesis. Hum. Mol. Genet. 14: 2521-2531.
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## CHROMOSOMAL LOCATION

Genetic locus: ITGB1BP1 (human) mapping to 2p25.1; ltgb1bp1 (mouse) mapping to 12 A1.2.

## SOURCE

ICAP-1 (L-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ICAP-1 of human origin.

# **STORAGE**

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

# 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-67916 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

ICAP-1 (L-18) is recommended for detection of ICAP-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

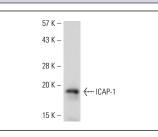
ICAP-1 (L-18) is also recommended for detection of ICAP-1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ICAP-1 siRNA (h): sc-62485, ICAP-1 siRNA (m): sc-62486, ICAP-1 shRNA Plasmid (h): sc-62485-SH, ICAP-1 shRNA Plasmid (m): sc-62486-SH, ICAP-1 shRNA (h) Lentiviral Particles: sc-62485-V and ICAP-1 shRNA (m) Lentiviral Particles: sc-62486-V.

Molecular Weight of ICAP-1: 22 kDa.

Positive Controls: rat small intestine extract: sc-364811 or mouse brain extract: sc-2253.

#### DATA



ICAP-1 (L-18): sc-67916. Western blot analysis of

ICAP-1 expression in rat small intestine tissue extract

## SELECT PRODUCT CITATIONS

1. Zhang, J., et al. 2010. Effects of transfection of ICAP-1 $\alpha$  and its mutants on adhesion and migration of 2H-11 cells. J. Huazhong Univ. Sci. Technol. Med. Sci. 30: 569-574.

### **RESEARCH USE**

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

