Cas-L (N-17): sc-6848



The Power to Question

BACKGROUND

Cas family proteins are adhesion docking molecules that mediate protein-protein interactions and contribute to a number of signal transduction pathways. Cas-L (also designated human enhancer of filamentation (HEF1) and neural precursor cell expressed, developmentally down-regulated 9 (NEDD9), participates in integrin and growth factor signaling pathways that regulate growth, motility and apoptosis. Cas-L consists of two isoforms, p105 and p115. The larger molecular weight form is a result of Ser/Thr phosphorylation. Cas-L phosphorylation is dependent on cell adhesion and Src kinase activity. Cas-L acts as a downstream effector of FAK in the invasive behavior of glioblastoma cells. TGFb1 regulates Cas-L gene expression and influences phosphorylation. Adhesion-dependent Actin organization regulates proteasomal turnover of Cas-L through the activity of PP2A. Tyrosine phosphorylated Cas-L can bind FAK in dendrite and soma of neurons after ischemia. Cas-L can promote neurite outgrowth of PC-12 cells.

CHROMOSOMAL LOCATION

Genetic locus: NEDD9 (human) mapping to 6p24.2; BCAR1 (human) mapping to 16q23.1; Nedd9 (mouse) mapping to 13 A3.3; Bcar1 (mouse) mapping to 8 E1.

SOURCE

Cas-L (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Cas-L of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6848 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Cas-L (N-17) is recommended for detection of Cas-L and, to a lesser extent, HEF-like protein and p130 Cas 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).

Cas-L (N-17) is also recommended for detection of Cas-L and, to a lesser extent, HEF-like protein and p130 Cas in additional species, including bovine and avian.

Suitable for use as control antibody for Cas-L siRNA (h): sc-40794, Cas-L siRNA (m): sc-40795, Cas-L shRNA Plasmid (h): sc-40794-SH, Cas-L shRNA Plasmid (m): sc-40795-SH, Cas-L shRNA (h) Lentiviral Particles: sc-40794-V and Cas-L shRNA (m) Lentiviral Particles: sc-40795-V.

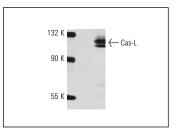
Molecular Weight of Cas-L: 105 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MCF7 whole cell lysate: sc-2206 or NIH/3T3 whole cell lysate: sc-2210.

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) Immunoprecip-itation: 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



Cas-L (N-17): sc-6848. Western blot analysis of Cas-L expression in Hella whole cell lysate

SELECT PRODUCT CITATIONS

1. Zhang, Z., et al. 1999. Cytoskeleton-dependent tyrosine phosphorylation of the p130Cas family member HEF1 downstream of the G protein-coupled Calcitonin receptor. J. Biol. Chem. 274: 25093-25098.

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.



Try **Cas-L (2G9):** sc-33659 or **Cas-L (2B11):** sc-33658, our highly recommended monoclonal alternatives to Cas-L (N-17).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com