

# Cas-L (H-70): sc-25503

## 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. TGF $\beta$ 1 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.

## REFERENCES

1. Law, S.F., et al. 2000. The docking protein HEF1 is an apoptotic mediator at focal adhesion sites. *Mol. Cell. Biol.* 20: 5184-5195.
2. Liu, X., et al. 2000. A novel ability of Smad3 to regulate proteasomal degradation of a Cas family member HEF1. *EMBO J.* 19: 6759-6769.

## CHROMOSOMAL LOCATION

Genetic locus: NEDD9 (human) mapping to 6p24.2; Nedd9 (mouse) mapping to 13 A3.3.

## SOURCE

Cas-L (H-70) is a rabbit polyclonal antibody raised against amino acids 765-834 of Cas-L of human origin.

## PRODUCT

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

## APPLICATIONS

Cas-L (H-70) is recommended for detection of Cas-L 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), 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).

Cas-L (H-70) is also recommended for detection of Cas-L in additional species, including equine, canine, bovine and porcine.

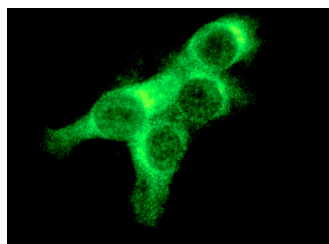
Suitable for use as control antibody for Cas-L siRNA (h): sc-40794, Cas-L siRNA (m): sc-40795, Cas-L shRNA Plasmid (h): sc-40794-SH, Cas-L shRNA Plasmid (m): sc-40795-SH, Cas-L shRNA (h) Lentiviral Particles: sc-40794-V and Cas-L shRNA (m) Lentiviral Particles: sc-40795-V.

Molecular Weight of Cas-L: 105 kDa.

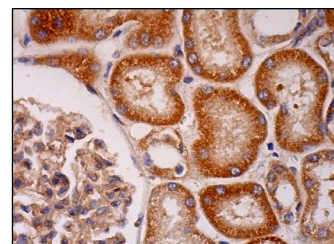
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz<sup>™</sup>: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



Cas-L (H-70): sc-25503. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization.



Cas-L (H-70): sc-25503. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of trophoblastic cells and decidual cells.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Satisfaction  
Guaranteed

Try **Cas-L (2G9): sc-33659** or **Cas-L (2B11): sc-33658**, our highly recommended monoclonal alternatives to Cas-L (H-70).