

# Eps8L1 (Z-18): sc-101950

## BACKGROUND

Eps8L1 (Eps8-like 1), also known as DRC3 or EPS8R1, is a 723 amino acid protein that localizes to the cytoplasm and belongs to the Eps8 (epidermal growth factor receptor pathway substrate 8) family. Expressed in placental tissue, Eps8L1 functions to stimulate the guanine exchange activity of Sos 1 (son of sevenless homolog 1), a protein that promotes the exchange of Ras-bound GDP for GTP. Additionally, Eps8L1 is thought to associate with Actin and, via this association, may play a role in membrane ruffling and remodeling of the Actin cytoskeleton. Through its ability to regulate protein activation and cytoskeleton dynamics, Eps8L1 may participate in cell growth and differentiation events within the cell. Eps8L1 contains one SH3 domain and is expressed as four isoforms due to alternative splicing events.

## REFERENCES

1. Pawson, T. and Schlessingert, J. 1993. SH2 and SH3 domains. *Curr. Biol.* 3: 434-442.
2. Tocchetti, A., et al. 2003. In silico analysis of the EPS8 gene family: genomic organization, expression profile, and protein structure. *Genomics* 81: 234-244.
3. Offenhäuser, N., et al. 2004. The eps8 family of proteins links growth factor stimulation to actin reorganization generating functional redundancy in the Ras/Rac pathway. *Mol. Biol. Cell* 15: 91-98.
4. Goicoechea, S., et al. 2006. Palladin binds to Eps8 and enhances the formation of dorsal ruffles and podosomes in vascular smooth muscle cells. *J. Cell Sci.* 119: 3316-3324.
5. Maa, M.C., et al. 2007. Eps8 facilitates cellular growth and motility of colon cancer cells by increasing the expression and activity of focal adhesion kinase. *J. Biol. Chem.* 282: 19399-19409.
6. Würtz, P., et al. 2007. Simultaneous detection of amide and methyl correlations using a time shared NMR experiment: application to binding epitope mapping. *J. Biomol NMR* 39: 97-105.
7. Kesti, T., et al. 2007. Reciprocal regulation of SH3 and SH2 domain binding via tyrosine phosphorylation of a common site in CD3-ε. *J. Immunol.* 179: 878-885.

## CHROMOSOMAL LOCATION

Genetic locus: EPS8L1 (human) mapping to 19q13.42.

## SOURCE

Eps8L1 (Z-18) is a purified rabbit polyclonal antibody raised against Eps8L1 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## STORAGE

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

## APPLICATIONS

Eps8L1 (Z-18) is recommended for detection of Eps8L1 of 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), 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).

Suitable for use as control antibody for Eps8L1 siRNA (h): sc-97584, Eps8L1 shRNA Plasmid (h): sc-97584-SH and Eps8L1 shRNA (h) Lentiviral Particles: sc-97584-V.

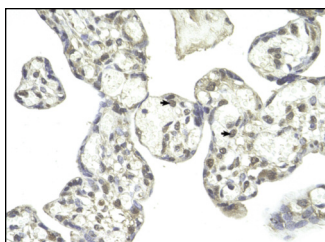
Molecular Weight of Eps8L1: 80 kDa.

Positive Controls: Eps8L1 (m): 293T Lysate: sc-126799, Jurkat whole cell lysate: sc-2204 or human placenta tissue.

## 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™ compatible goat anti-rabbit IgG-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 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™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



Eps8L1 (Z-18): sc-101950. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing nuclear and cytoplasmic staining.

## 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.