

# Eps8L1 (G-14): sc-132673

## 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., et al. 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.

## CHROMOSOMAL LOCATION

Genetic locus: EPS8L1 (human) mapping to 19q13.42; Eps8L1 (mouse) mapping to 7 A1.

## SOURCE

Eps8L1 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Eps8L1 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-132673 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

Eps8L1 (G-14) is recommended for detection of Eps8L1 isoforms 1-4 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); non cross-reactive with Eps8L2 or Eps8L3.

Eps8L1 (G-14) is also recommended for detection of Eps8L1 isoforms 1-4 in additional species, including canine.

Suitable for use as control antibody for Eps8L1 siRNA (h): sc-97584, Eps8L1 siRNA (m): sc-144912, Eps8L1 shRNA Plasmid (h): sc-97584-SH, Eps8L1 shRNA Plasmid (m): sc-144912-SH, Eps8L1 shRNA (h) Lentiviral Particles: sc-97584-V and Eps8L1 shRNA (m) Lentiviral Particles: sc-144912-V.

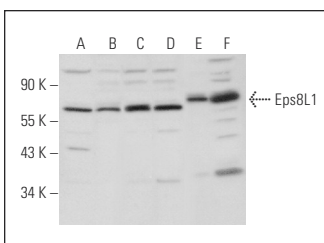
Molecular Weight of Eps8L1: 80 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, MOLT-4 cell lysate: sc-2233 or Hep G2 cell lysate: sc-2227.

## 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) Immunoprecipitation: 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



Eps8L1 (G-14): sc-132673. Western blot analysis of Eps8L1 expression in Jurkat (A), Hep G2 (B), HEK293 (C), HeLa (D), NIH/3T3 (E) and MOLT-4 (F) whole cell lysates.

## 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.