

Eps8L2 (P-12): sc-167763

BACKGROUND

Eps8L2 (epidermal growth factor receptor kinase substrate 8-like protein 2), also known as EPS8R2 or PP13181, is a 715 amino acid protein that localizes to the cytoplasm and belongs to the Eps8 (epidermal growth factor receptor pathway substrate 8) family. Expressed in placenta and fibroblasts, Eps8L2 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, Eps8L2 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, Eps8L2 may participate in cell growth and differentiation events within the cell. Eps8L2, a protein that is expressed as two isoforms due to alternative splicing, contains one PID (phosphotyrosine interaction) domain and one SH3 domain.

REFERENCES

1. Tocchetti, A., et al. 2003. In silico analysis of the EPS8 gene family: genomic organization, expression profile, and protein structure. *Genomics* 81: 234-244.
2. 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.
3. Wang, X., et al. 2007. Manipulation of thyroid status and/or GH injection alters hepatic gene expression in the juvenile chicken. *Cytogenet. Genome Res.* 117: 174-188.
4. 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: EPS8L2 (human) mapping to 11p15.5; Eps8L2 (mouse) mapping to 7 F5.

SOURCE

Eps8L2 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Eps8L2 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-167763 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.

RESEARCH USE

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

APPLICATIONS

Eps8L2 (P-12) is recommended for detection of Eps8L2 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 Eps8L1 or Eps8L3.

Suitable for use as control antibody for Eps8L2 siRNA (h): sc-96954, EPS8L2 siRNA (m): sc-144913, Eps8L2 shRNA Plasmid (h): sc-96954-SH, EPS8L2 shRNA Plasmid (m): sc-144913-SH, Eps8L2 shRNA (h) Lentiviral Particles: sc-96954-V and EPS8L2 shRNA (m) Lentiviral Particles: sc-144913-V.

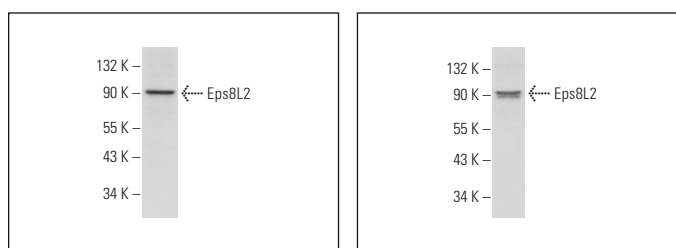
Molecular Weight of Eps8L2: 81 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, HeLa whole cell lysate: sc-2200 or HEK293 whole cell lysate: sc-45136.

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



Eps8L2 (P-12): sc-167763. Western blot analysis of Eps8L2 expression in HeLa whole cell lysate.

Eps8L2 (P-12): sc-167763. Western blot analysis of Eps8L2 expression in HEK293 whole cell lysate.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.