

Eps8L2 (F-8): sc-514673

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.

SOURCE

Eps8L2 (F-8) is a mouse monoclonal antibody raised against amino acids 523-577 mapping within an internal region of Eps8L2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Eps8L2 (F-8) is available conjugated to agarose (sc-514673 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514673 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514673 PE), fluorescein (sc-514673 FITC), Alexa Fluor® 488 (sc-514673 AF488), Alexa Fluor® 546 (sc-514673 AF546), Alexa Fluor® 594 (sc-514673 AF594) or Alexa Fluor® 647 (sc-514673 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514673 AF680) or Alexa Fluor® 790 (sc-514673 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Eps8L2 (F-8) is recommended for detection of Eps8L2 of human origin by Western Blotting (starting dilution 1:100, 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).

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

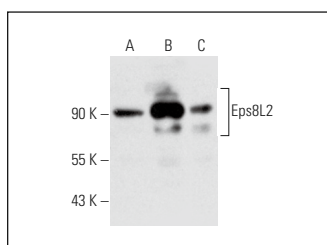
Molecular Weight of Eps8L2: 81 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, HeLa whole cell lysate: sc-2200 or human liver extract: sc-363766.

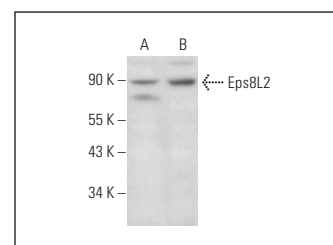
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Eps8L2 (F-8): sc-514673. Western blot analysis of Eps8L2 expression in HeLa (A) and A-431 (B) whole cell lysates and human liver tissue extract (C).



Eps8L2 (F-8): sc-514673. Western blot analysis of Eps8L2 expression in P19 (A) and 3T3-L1 (B) whole cell lysates.

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 for detailed protocols and support products.