SANTA CRUZ BIOTECHNOLOGY, INC.

Eps8L2 (WP.7): sc-100722

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 seven-less 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 cyto-skeleton 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.
5. Tang, L.Y., et al. 2007. Quantitative phosphoproteome profiling of Wnt-3a-mediated signaling network: indicating the involvement of ribonucleoside-diphosphate reductase M2 subunit phosphorylation at residue Serine 20 in canonical Wnt signal transduction. Mol. Cell. Proteomics 6: 1952-1967.

CHROMOSOMAL LOCATION

Genetic locus: EPS8L2 (human) mapping to 11p15.5; Eps8l2 (mouse) mapping to 7 F5.

SOURCE

Eps8L2 (WP.7) is a mouse monoclonal antibody raised against recombinant Eps8L2 of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

Eps8L2 (WP.7) 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)] 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 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.

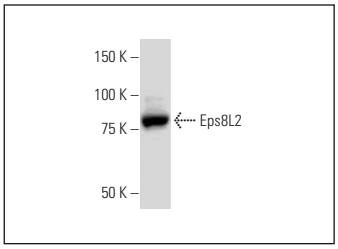
Molecular Weight of Eps8L2: 81 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201.

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).

DATA



Eps8L2 (WP.7): sc-100722. Western blot analysis of Eps8L2 expression in A-431 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Jhaveri, D.T., et al. 2016. Using quantitative seroproteomics to identify antibody biomarkers in pancreatic cancer. Cancer Immunol. Res. 4: 225-233.

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.