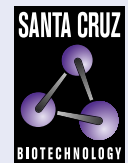


CELSR1 (E-3): sc-514376



The Power to Question

BACKGROUND

Drosophila flamingo is a seven pass transmembrane cadherin that is necessary for dendritic patterning and axon guidance. Flamingo mammalian homologs play similar roles in neuronal development, during which they play an important role in cell-cell signaling. Cadherin EGF LAG seven pass G type receptors (CELSRs) are multi-pass membrane proteins that belong to the G protein-coupled receptor family of proteins. Silencing CELSR2 gene expression results in significant simplification of dendritic arbors of cortical pyramidal neurons and Purkinje neurons, which may be due to branch retraction. In mouse, CELSR1, CELSR2 and CELSR3 are expressed in the nervous system at early developmental stages, and show expression patterns in the developing CNS. CELSR2 is distributed at intercellular boundaries in the whisker and on processes of neuronal cells such as hippocampal pyramidal cells, Purkinje cells and olfactory neurons.

REFERENCES

1. Vincent, J.B., et al. 2000. The human homologue of flamingo, EGFL2, encodes a brain-expressed large cadherin-like protein with epidermal growth factor-like domains, and maps to chromosome 1p13.3-p21.1. *DNA Res.* 7: 233-235.
2. Tissir, F., et al. 2002. Developmental expression profiles of CELSR (Flamingo) genes in the mouse. *Mech. Dev.* 112: 157-160.
3. Curtin, J.A., et al. 2003. Mutation of CELSR1 disrupts planar polarity of inner ear hair cells and causes severe neural tube defects in the mouse. *Curr. Biol.* 13: 1129-1133.
4. Georgieva, L., et al. 2003. Genetic variation in the seven-pass transmembrane cadherin CELSR1: lack of association with schizophrenia. *Psychiatr. Genet.* 13: 103-106.

CHROMOSOMAL LOCATION

Genetic locus: CELSR1 (human) mapping to 22q13.31.

SOURCE

CELSR1 (E-3) is a mouse monoclonal antibody raised against amino acids 2684-2809 mapping near the C-terminus of CELSR1 of human origin.

PRODUCT

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

CELSR1 (E-3) is available conjugated to agarose (sc-514376 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514376 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514376 PE), fluorescein (sc-514376 FITC), Alexa Fluor® 488 (sc-514376 AF488), Alexa Fluor® 546 (sc-514376 AF546), Alexa Fluor® 594 (sc-514376 AF594) or Alexa Fluor® 647 (sc-514376 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514376 AF680) or Alexa Fluor® 790 (sc-514376 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

CELSR1 (E-3) is recommended for detection of CELSR1 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 CELSR1 siRNA (h): sc-60349, CELSR1 shRNA Plasmid (h): sc-60349-SH and CELSR1 shRNA (h) Lentiviral Particles: sc-60349-V.

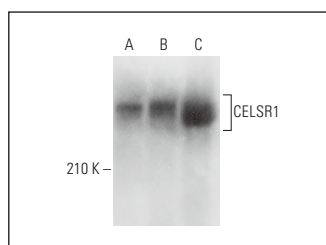
Molecular Weight of CELSR1: 329 kDa.

Positive Controls: Caki-1 cell lysate: sc-2224, HeLa whole cell lysate: sc-2200 or MDA-MB-231 cell lysate: sc-2232.

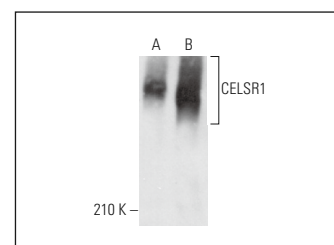
RECOMMENDED SUPPORT REAGENTS

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



CELSR1 (E-3): sc-514376. Western blot analysis of CELSR1 expression in MDA-MB-231 (A), HeLa (B) and Caki-1 (C) whole cell lysates.



CELSR1 (E-3): sc-514376. Western blot analysis of CELSR1 expression in Caki-1 (A) and T-47D (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.