

Vangl2 (C-8): sc-515154

BACKGROUND

The Vang family of proteins are integral membrane proteins that are homologs of the *Drosophila* tissue polarity gene strabismus. The gene encoding for Van Gogh-like protein 1 (Vangl1), also designated strabismus 2 (STB2), localizes to chromosome 1p11-p13.1. Van Gogh-like protein 2 (Vangl2), also designated strabismus 1 (STB1), localizes on chromosome 1q23.2. Vangl1 is expressed in testis and ovary, but also in gastric and pancreatic cancer. Vangl proteins play a key developmental role in establishing planar cell polarity (PCP) and in regulating convergent extension (CE) movements during embryogenesis. Vangl1 and Vangl2 are both downregulated in several cancer cell lines and primary tumors.

REFERENCES

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- Torban, E., et al. 2004. Independent mutations in mouse Vangl2 that cause neural tube defects in looptail mice impair interaction with members of the dishevelled family. *J. Biol. Chem.* 279: 52703-52713.
- Lu, X., et al. 2004. PTK7/CCK-4 is a novel regulator of planar cell polarity in vertebrates. *Nature* 430: 93-98.
- Torban, E., et al. 2004. Van Gogh-like 2 (strabismus) and its role in planar cell polarity and convergent extension in vertebrates. *Trends Genet.* 20: 570-577.
- Katoh, M., et al. 2005. Identification and characterization of rat Ankrd6 gene in silico. *Int. J. Mol. Med.* 15: 359-363.
- Phillips, H.M., et al. 2005. Vangl2 acts via RhoA signaling to regulate polarized cell movements during development of the proximal outflow tract. *Circ. Res.* 96: 292-299.

CHROMOSOMAL LOCATION

Genetic locus: VANGL2 (human) mapping to 1q23.2; Vangl2 (mouse) mapping to 1 H3.

SOURCE

Vangl2 (C-8) is a mouse monoclonal antibody raised against amino acids 268-322 mapping within a cytoplasmic domain of Vangl2 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.

STORAGE

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

PROTOCOLS

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

APPLICATIONS

Vangl2 (C-8) is recommended for detection of Vangl2 of mouse, rat and 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 Vangl2 siRNA (h): sc-45595, Vangl2 siRNA (m): sc-45596, Vangl2 shRNA Plasmid (h): sc-45595-SH, Vangl2 shRNA Plasmid (m): sc-45596-SH, Vangl2 shRNA (h) Lentiviral Particles: sc-45595-V and Vangl2 shRNA (m) Lentiviral Particles: sc-45596-V.

Molecular Weight of Vangl2: 65 kDa.

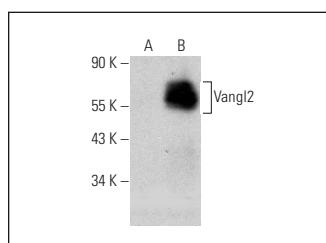
Positive Controls: Vangl2 (m): 293T Lysate: sc-124536.

RECOMMENDED SUPPORT REAGENTS

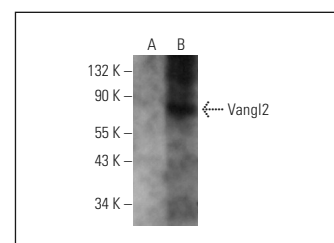
To ensure optimal results, the following support reagents are recommended:

- 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, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.
- Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
- 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



Vangl2 (C-8): sc-515154. Western blot analysis of Vangl2 expression in non-transfected: sc-117752 (A) and mouse Vangl2 transfected: sc-124536 (B) 293T whole cell lysates.



Vangl2 (C-8): sc-515154. Western blot analysis of Vangl2 expression in non-transfected: sc-117752 (A) and mouse Vangl2 transfected: sc-124536 (B) 293T whole cell lysates.

RESEARCH USE

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