

# Vangl2 (H-55): sc-67136

## 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

Vangl2 (H-55) is a rabbit polyclonal antibody raised against amino acids 268-322 mapping within a cytoplasmic domain of Vangl2 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.

## 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

Vangl2 (H-55) is recommended for detection of Vangl2 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).

Vangl2 (H-55) is also recommended for detection of Vangl2 in additional species, including equine, bovine and avian.

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.

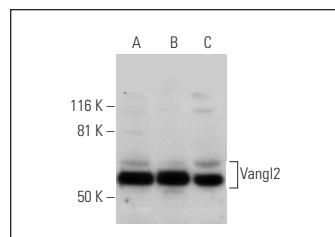
Molecular Weight of Vangl2: 65 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, SK-N-SH cell lysate: sc-2410 or NIH/3T3 whole cell lysate: sc-2210.

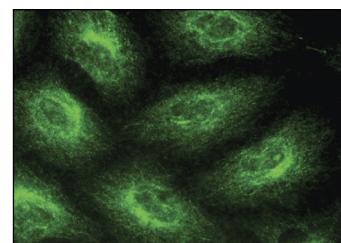
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Vangl2 (H-55): sc-67136. Western blot analysis of Vangl2 expression in IMR-32 (**A**), SK-N-SH (**B**) and NIH/3T3 (**C**) whole cell lysates.



Vangl2 (H-55): sc-67136. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

## SELECT PRODUCT CITATIONS

1. Sugiyama, Y., et al. 2010. Secreted frizzled-related protein disrupts PCP in eye lens fiber cells that have polarised primary cilia. *Dev. Biol.* 338: 193-201.
2. Webb, S.W., et al. 2011. Regulation of PCDH15 function in mechanosensory hair cells by alternative splicing of the cytoplasmic domain. *Development* 138: 1607-1617.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Vangl2 (C-2): sc-515187** or **Vangl2 (C-8): sc-515154**, our highly recommended monoclonal alternatives to Vangl2 (H-55).