

# Rabbit Anti-VANGL2 antibody

## SL23065R

Product Name:	VANGL2
Chinese Name:	神经管畸形相关蛋白VANGL2抗体
Alias:	Homolog of Drosophila strabismus; KIAA1215; Loop tail associated protein; loop tail protein 1 homolog; Loop-tail protein 1 homolog; LPP 1; LPP1; LTAP; STB 1; STB1; STBM 1; STBM; STBM1; Strabismus 1; van Gogh like protein 2; Van Gogh-like protein 2; Vang (van gogh, Drosophila) like 2; Vang like 2 (van gogh, Drosophila); vang like 2; vang like protein 2; VANG2_HUMAN; VANGL 2; Vangl2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Cow, Sheep,
Applications:	WB=1:500-2000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	60kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human VANGL2:11-100/521 <cytoplasmic></cytoplasmic>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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 Strabismus1 (STB1), localizes on chromosome 1q22-q23. 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 down-regulated in several cancer cell lines and primary tumors.

Involved in the control of early morphogenesis and patterning of both axial midline structures and the development of neural plate. Plays a role in the regulation of planar cell polarity, particularly in the orientation of stereociliary bundles in the cochlea. Required for polarization and movement of myocardializing cells in the outflow tract and seems to act via RHOA signaling to regulate this process.

#### **Function:**

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#### Subunit:

Interacts through its C-terminal region with the N-terminal half of DVL1, DVL2 and DVL3. The PDZ domain of DVL1, DVL2 and DVL3 is required for the interaction. Also interacts with the PDZ domains of MAGI3, SCRIB/SCRB1 and FZD3 (By similarity).

#### Subcellular Location:

Membrane; Multi-pass membrane protein (Potential).

#### DISEASE:

Defects in VANGL2 are a cause of neural tube defects (NTD) [MIM:182940]. NTD are congenital malformations of the central nervous system and adjacent structures related to defective neural tube closure during the first trimester of pregnancy. Failure of neural tube closure can occur at any level of the embryonic axis. Common NTD forms include anencephaly, myelomeningocele and spina bifida, which result from the failure of fusion in the cranial and spinal region of the neural tube. NTDs have a multifactorial etiology encompassing both genetic and environmental components.

#### Similarity:

Belongs to the Vang family.

#### SWISS:

O9ULK5

#### Gene ID:

57216

#### Database links:

Entrez Gene: 57216Human

Entrez Gene: 93840Mouse

Entrez Gene: 289229Rat

Omim: 600533Human

SwissProt: Q9ULK5Human

SwissProt: Q91ZD4Mouse

SwissProt: P84889Rat

Unigene: 99477Human

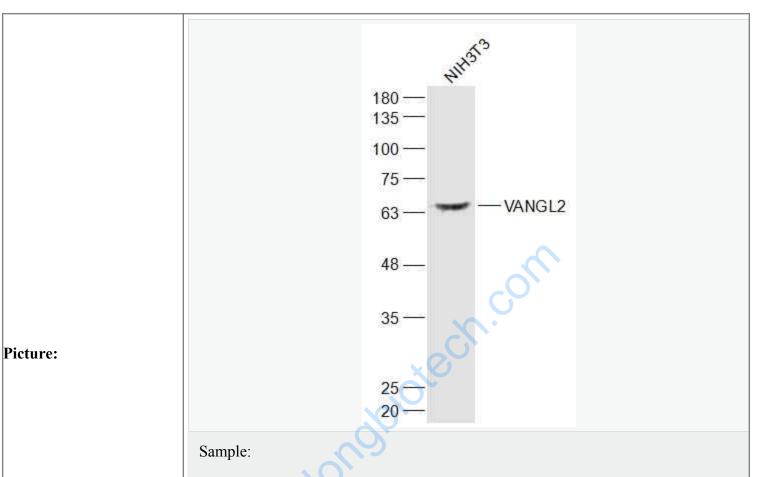
Unigene: 36148 Mouse

Unigene: 392110 Mouse

Unigene: 198958Rat

### Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



NIH/3T3(Human) Cell Lysate at 30 ug

Primary: Anti-VANGL2 (SL23065R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 60 kD

Observed band size: 60 kD