

Rabbit Anti-VANGL1 antibody

SL8527R

Product Name:	VANGL1
Chinese Name:	Tumour抑制基因LPP2抗体
Alias:	Loop tail protein 2 homolog; Loop-tail protein 2 homolog; LPP2; MGC5338; STB2; STBM2; Strabismus 2; Van Gogh like protein 1; Van Gogh-like protein 1; vang like 1 (van gogh, Drosophila); Vang like protein 1; Vang-like protein 1; VANG1_HUMAN; VANGL 1; LPP2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	60 kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human VANGL1/LPP2:151-250/524 <extracellular></extracellular>
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:	<u>PubMed</u>
Product Detail:	The Vang family of proteins are integral membrane proteins that are homologues of the Drosophila tissue polarity gene strabismus. The gene encoding for Van Gogh-like protein 1 (Vangl1), also designated Strabismus 2 (STB2), localizes to human

chromosome 1p11-p13.1. Van Gogh-like protein 2 (Vangl2), also designated Strabismus 1 (STB1), localizes to chromosome 1q22-q23. Vangl1 is expressed primarily in testis and ovary, but is also expressed 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.

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 (By similarity).

Subcellular Location:

Membrane; Multi-pass membrane protein (Potential).

Tissue Specificity:

According to PubMed:11956595, ubiquitously expressed. According to PubMed:12011995, expressed specifically in testis and ovary.

DISEASE:

Defects in VANGL1 are a cause of neural tube defects (NTD) [MIM:182940]. NTD are congenital malformations. The most common forms of NTD are described as open defects (including anencephaly and myelomeningocele, or spina bifida), which result from the failure of fusion in the cranial and spinal region of the neural tube, respectively. Other open dysraphisms (including myeloschisis, hemimyelomeningocele, and hemimyelocele) are sometimes associated with a Chiari type 2 malformation. A number of skin-covered (closed) NTD are categorized clinically depending on the presence of a subcutaneous mass (lipomyeloschisis, lipomyelomeningocele, meningocele, and myelocystocele) or the absence of such a mass (complex dysraphic states, including split cord malformations, dermal sinus, caudal regression, and segmental spinal dysgenesis).

Defects in VANGL1 are a cause of sacral defect with anterior meningocele (SDAM) [MIM:600145]. SDAM is a form of caudal dysgenesis. It is present at birth and becomes symptomatic later in life, usually because of obstructive labor in females, chronic constipation, or meningitis. Inheritance is autosomal dominant.

Similarity:

Belongs to the Vang family.

SWISS:

Q8TAA9

Gene ID:

81839

Database links:

Entrez Gene: 81839Human

Entrez Gene: 229658 Mouse

Entrez Gene: 690366Rat

Omim: 610132Human

SwissProt: Q8TAA9Human

SwissProt: Q80Z96Mouse

Unigene: 515130Human

<u>Unigene: 118004</u>Mouse

Unigene: 35269Rat

Important Note:

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

LPP2是一种分子量为60kDa的多次Transmembrane

protein, 是Vang蛋白家族成员之一。VANGL1由524个氨基酸组成, 其中包括4个跨膜结构域。VANGL1可能一种Tumour抑制基因, 该基因的突变会导致神经管缺失(neural tube defects, NTD)。