

**Goat Anti-VANGL2 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF2140a****Specification**

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**Goat Anti-VANGL2 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">O9ULK5</a>
Other Accession	<a href="#">NP_065068</a> , <a href="#">57216</a> , <a href="#">93840 (mouse)</a>
Reactivity	Human, Mouse
Predicted	Zebrafish, Cow
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	59714

**Goat Anti-VANGL2 Antibody - Additional Information****Gene ID** 57216**Other Names**

Vang-like protein 2, Loop-tail protein 1 homolog, Strabismus 1, Van Gogh-like protein 2, VANGL2, KIAA1215, STB1

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-VANGL2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-VANGL2 Antibody - Protein Information****Name** VANGL2**Synonyms** KIAA1215, STB1**Function**

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. Required for cell surface localization of FZD3 and FZD6 in the inner ear (By similarity).

#### Cellular Location

Cell membrane; Multi-pass membrane protein

### Goat Anti-VANGL2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Goat Anti-VANGL2 Antibody - Images



AF2140a (0.3 µg/ml) staining of Mouse Brain lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### Goat Anti-VANGL2 Antibody - Background

Planar cell polarity (PCP) is the term given to global cell polarization, such as the alignment of mammalian body hair along the anterior-posterior axis or the orientation of stereocilia bundles in the inner ear. VANGL2 is a PCP protein that is involved in the transmission of directional cues to align either individual cells within an epithelial sheet or multicellular clusters, which polarize as a group (Devenport and Fuchs, 2008 [PubMed 18849982]).

### Goat Anti-VANGL2 Antibody - References

VANGL2 mutations in human cranial neural-tube defects. Lei YP, et al. N Engl J Med, 2010 Jun 10. PMID 20558380.  
A genome-wide study of common SNPs and CNVs in cognitive performance in the CANTAB. Need AC, et al. Hum Mol Genet, 2009 Dec 1. PMID 19734545.  
The planar cell polarity protein Van Gogh-Like 2 regulates tumor cell migration and matrix metalloproteinase-dependent invasion. Cantrell VA, et al. Cancer Lett, 2010 Jan 1. PMID 19577357.

Planar polarization in embryonic epidermis orchestrates global asymmetric morphogenesis of hair follicles. Devenport D, et al. Nat Cell Biol, 2008 Nov. PMID 18849982.

Mutation analysis of the Vangl2 coding region revealed no common cause for Tetralogy of Fallot.

Erdal E, et al. J Int Med Res, 2007 Nov-Dec. PMID 18034999.