

#### DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, and rat Vang-like Protein 2/VANGL2 in direct ELISAs and Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant human VANGL1 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Vang-like Protein 2/VANGL2 Gln241-Val521 Accession # Q9ULK5
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

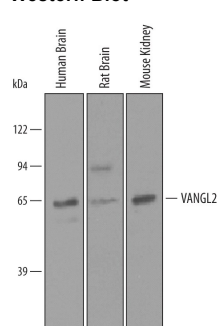
#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

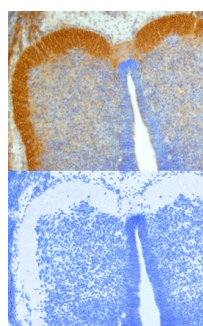
#### DATA

##### Western Blot



**Detection of Human/Mouse/Rat Vang-like Protein 2/VANGL2 by Western Blot.** Western blot shows lysates of mouse kidney, human and rat brain tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human/Mouse/Rat Vang-like Protein 2/VANGL2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4815) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Vang-like Protein 2/VANGL2 at approximately 65 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 8](#).

##### Immunohistochemistry



**Vang-like Protein 2/VANGL2 in Mouse Embryo.** Vang-like Protein 2/VANGL2 was detected in immersion fixed frozen sections of mouse embryo (E15.5) using Sheep Anti-Human/Mouse/Rat Vang-like Protein 2/VANGL2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4815) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Lower panel shows a lack of labeling when primary antibodies are omitted and tissue is stained only with secondary antibody followed by incubation with detection reagents. Specific staining was localized to developing spinal cord. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### BACKGROUND

VANGL2 (van Gogh-like protein 2; also Strabismus and Ltap) is a 65 kDa member of the Vang family of proteins. It is found in the membranes of embryonic neurons and epithelium where it associates with DVL1-3 and various frizzleds. VANGL2 mutations are associated with neural tube defects. Human VANGL2 is a 521 amino acid (aa) 4-transmembrane protein that contains an N-terminal (aa 1-108) and C-terminal (aa 239-521) cytoplasmic domain. There is a Ser-rich region in the N-terminus (aa 5-20) and a PDZ-binding motif over aa 506-521. Over aa 241-521, human, mouse and rat show total identity in amino acid sequence.