**BACKGROUND**

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 1p13.1. Van Gogh-like protein 2 (Vangl2), also designated Strabismus 1 (STB1), localizes to chromosome 1q23.2. 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.

**SOURCE**

Vangl1 (E-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 275-305 within a cytoplasmic domain of Vangl1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Vangl1 (E-3) is available conjugated to agarose (sc-166844 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166844 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166844 PE), fluorescein (sc-166844 FITC), Alexa Fluor® 488 (sc-166844 AF488), Alexa Fluor® 546 (sc-166844 AF546), Alexa Fluor® 594 (sc-166844 AF594) or Alexa Fluor® 647 (sc-166844 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166844 AF680) or Alexa Fluor® 790 (sc-166844 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-166844 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

Vangl1 (E-3) is recommended for detection of Vangl1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Vangl1 (E-3) is also recommended for detection of Vangl1 in additional species, including equine, canine, bovine and porcine.


**CHROMOSOMAL LOCATION**

Genetic locus: **VANGL1** (human) mapping to 1p13.1; Vangl1 (mouse) mapping to 3 F2.2.

**REFERENCES**


**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG B-HRP: sc-516102 or m-IgG B-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Lumino Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG B-FITC: sc-516140 or m-IgG B-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-358850.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.