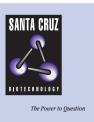
# SANTA CRUZ BIOTECHNOLOGY, INC.

# KPL2 (E-13): sc-104957



#### BACKGROUND

Flagella and cillia are both membrane-bound projections from the cell surface that beat in distinctive patterns. Cilia are shorter and usually more profuse than flagella and contain a microtubule cytoskeleton, the ciliary axoneme, surrounded by a ciliary membrane. The ciliary membranes of all cilia hold specific receptors and ion channel proteins that initiate signaling pathways that regulate motility and/or link mechanical or chemical stimuli to intracellular transduction cascades regulating differentiation, migration and cell growth during development and in adulthood. KPL2, also known as SPEF2 (sperm flagellar 2), is a 1,822 amino acid protein that contains a calponin homology domain, three nuclear localization signals, a consensus P-loop and a proline-rich region. Required for correct axoneme develoment, KPL2 is predominantly expressed in cells with cilia or flagella. Four isoforms of KPL2 exists as a result of alternative splicing events.

## REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: SPEF2 (human) mapping to 5p13.2; Spef2 (mouse) mapping to 15 A1.

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## **RESEARCH USE**

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

#### SOURCE

KPL2 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KPL2 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-104957 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

KPL2 (E-13) is recommended for detection of KPL2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with KPL2-3.

Suitable for use as control antibody for KPL2 siRNA (h): sc-92018, KPL2 siRNA (m): sc-146562, KPL2 shRNA Plasmid (h): sc-92018-SH, KPL2 shRNA Plasmid (m): sc-146562-SH, KPL2 shRNA (h) Lentiviral Particles: sc-92018-V and KPL2 shRNA (m) Lentiviral Particles: sc-146562-V.

Molecular Weight of KPL2: 210 kDa.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.