SANTA CRUZ BIOTECHNOLOGY, INC.

PIKE (h): 293T Lysate: sc-114780

BACKGROUND

PIKE (phosphatidylinositol-3-kinase enhancer), also known as CENTG1 (Centaurin γ1), AGAP2 or GGAP2, is a 1,192 amino acid protein that is expressed as 2 isoforms, namely PIKE-L, which is brain-specific and PIKE-A (also known as PIKE-S), which is found throughout the body. Localized to both the nucleus and the cytoplasm, PIKE functions as a GAP (GTPase-activating protein) that is activated by phosphatidylinositol 4,5-bisphosphate (PIP2) and plays an important role in the prevention of neuronal apoptosis. Specifically, PIKE interacts with proteins such as ARF1, ARF5, PLC γ1 and Homer, and via these interactions, regulates endosomal trafficking and protein-coupling events. PIKE contains one PH domain, one miro domain, one ARF-GAP domain and two ANK repeats through which it conveys its protein-binding and GAP activity. While overexpression of PIKE causes tumor growth and invasion, reduced levels of PIKE are associated with neuronal cell death.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: AGAP2 (human) mapping to 12q14.1.

PRODUCT

PIKE (h): 293T Lysate represents a lysate of human PIKE transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

PIKE (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive PIKE antibodies. Recommended use: 10-20 µl per lane.

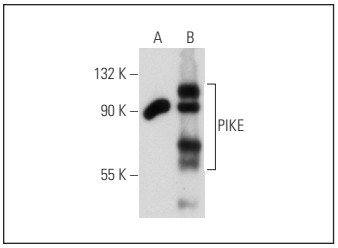
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PIKE (G-9): sc-166864 is recommended as a positive control antibody for Western Blot analysis of enhanced human PIKE expression in PIKE transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PIKE (G-9): sc-166864. Western blot analysis of PIKE expression in non-transfected: sc-117752 (**A**) and human PIKE transfected: sc-114780 (**B**) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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