

# PIP5KIII (h): 293T Lysate: sc-114873

## BACKGROUND

The PIP5K family is divided into type I, type II and type III proteins, each of which phosphorylates distinct substrates. The PIP5K proteins contain an activation loop which determines their enzymatic specificity and subcellular targeting. Phosphatidylinositol-4-phosphate-5-kinase, also known as PIP5KIII or PIP5K3, synthesizes phosphatidylinositol-4,5-bisphosphate, which regulates various processes including cell proliferation, survival, membrane trafficking and cytoskeletal organization. Located in the membrane of the endosome, PIP5KIII contains an FYVE-type zinc finger and catalyzes the rate-limiting step in the production of phosphatidylinositol, a phospholipid that plays a role in Actin dynamics. Defects in the gene encoding PIP5KIII lead to corneal fleck dystrophy (CFD), an autosomal disorder in which small white flecks are found throughout the corneal stroma.

## REFERENCES

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## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## CHROMOSOMAL LOCATION

Genetic locus: PIKFYVE (human) mapping to 2q34.

## PRODUCT

PIP5KIII (h): 293T Lysate represents a lysate of human PIP5KIII transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

PIP5KIII (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive PIP5KIII 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.

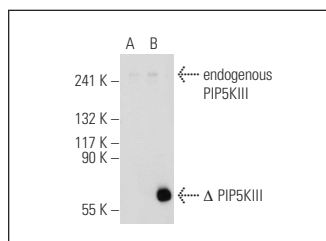
PIP5KIII (64-Q6): sc-100408 is recommended as a positive control antibody for Western Blot analysis of enhanced human PIP5KIII expression in PIP5KIII transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## 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



PIP5KIII (64-Q6): sc-100408. Western blot analysis of PIP5KIII expression in non-transfected: sc-117752 (A) and truncated human PIP5KIII transfected: sc-114873 (B) 293T whole cell lysates.

## RESEARCH USE

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