# SANTA CRUZ BIOTECHNOLOGY, INC.

# LIPK (D-18): sc-243267



BACKGROUND

Lipolysis is the biochemical pathway responsible for the catabolism of triacylglycerol (TAG) stored in cellular lipid droplets. The hydrolytic cleavage of TAG generates non-esterified fatty acids, which are subsequently used as energy substrates, essential precursors for lipid and membrane synthesis, or mediators in cell signaling processes. Consistent with its central importance in lipid and energy homeostasis, lipolysis occurs in essentially all tissues and cell types. At least six families of mammalian acid lipases catalyze the hydrolysis of triglycerides in the body, designated as LIPA (lysosomal), LIPF (gastric), LIPJ (testis) and LIPK, LIPM and LIPN (epidermal), which belong to the AB hydrolase superfamily. LIPK is exclusively expressed in the epidermis within the granular keratinocyte and plays a highly specific role in the last step of keratinocyte differentiation.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: LIPK (human) mapping to 10q23.31; Lipk (mouse) mapping to 19 C1.

### **RESEARCH USE**

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

## SOURCE

LIPK (D-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LIPK of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-243267 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **APPLICATIONS**

LIPK (D-18) is recommended for detection of LIPK 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).

LIPK (D-18) is also recommended for detection of LIPK in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for LIPK siRNA (h): sc-90704, LIPK siRNA (m): sc-146741, LIPK shRNA Plasmid (h): sc-90704-SH, LIPK shRNA Plasmid (m): sc-146741-SH, LIPK shRNA (h) Lentiviral Particles: sc-90704-V and LIPK shRNA (m) Lentiviral Particles: sc-146741-V.

Molecular Weight of LIPK: 46 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-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## **STORAGE**

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

### PROTOCOLS

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