

# YPEL5 (D-12): sc-137939

## BACKGROUND

The family of yippee-like (YPEL) proteins include YPEL1, YPEL2, YPEL3, YPEL4 and YPEL5, all of which are widely expressed in both adult and fetal tissue and contain a characteristic 86-amino acid YPEL consensus sequence. YPEL proteins share a high degree of sequence homology with their rodent homologs, suggesting a conserved function between species. YPEL5 (yippee-like 5), also known as CGI-127, is a 121 amino acid protein that may be involved in cell division-related function. During cell cycle progression, YPEL5 localizes to multiple subcellular regions. At interphase of mitosis, YPEL5 localizes to the nucleus and centrosome, then changes its location sequentially to the spindle poles, mitotic spindle and spindle midzone, and finally it is transferred to the midbody at cytokinesis. The function of YPEL5 during cell division is not yet fully understood.

## REFERENCES

- Farlie, P., et al. 2001. Ypel1: a novel nuclear protein that induces an epithelial-like morphology in fibroblasts. *Genes Cells* 6: 619-629.
- Roxström-Lindquist, K., et al. 2001. The *Drosophila* gene Yippee reveals a novel family of putative zinc binding proteins highly conserved among eukaryotes. *Insect Mol. Biol.* 10: 77-86.
- Hosono, K., et al. 2004. Identification and characterization of a novel gene family YPEL in a wide spectrum of eukaryotic species. *Gene* 340: 31-43.
- Online Mendelian Inheritance in Man, OMIM™. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 609724. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Hosono, K., et al. 2010. YPEL5 protein of the YPEL gene family is involved in the cell cycle progression by interacting with two distinct proteins RanBPM and RanBP10. *Genomics* 96: 102-111.

## CHROMOSOMAL LOCATION

Genetic locus: YPEL5 (human) mapping to 2p23.1; Ypel5 (mouse) mapping to 17 E1.3.

## SOURCE

YPEL5 (D-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of YPEL5 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-137939 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **\*\*DO 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.

## APPLICATIONS

YPEL5 (D-12) is recommended for detection of YPEL5 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 other YPEL family members.

Suitable for use as control antibody for YPEL5 siRNA (h): sc-94998, YPEL5 siRNA (m): sc-155418, YPEL5 shRNA Plasmid (h): sc-94998-SH, YPEL5 shRNA Plasmid (m): sc-155418-SH, YPEL5 shRNA (h) Lentiviral Particles: sc-94998-V and YPEL5 shRNA (m) Lentiviral Particles: sc-155418-V.

Molecular Weight of YPEL5: 14 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) Immunofluorescence: 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.

## PROTOCOLS

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