

# Porimin (D-9): sc-377189

## BACKGROUND

Various death signals trigger cell death mediated by distinct pathways, including apoptosis and cytolysis, or oncosis. Oncosis is characterized by organelle and cell swelling, vacuolization and an increase in membrane permeability. Porimin is a 189 amino acid, keratinocyte-associated, pro-oncosis cell surface receptor that induces membrane injury. Porimin is a member of the cell membrane-associated Mucin family, characterized by the many O-linked and seven N-linked glycosylation sites on the extracellular domain. All tissues express Porimin except for ovary; it is highly expressed in colorectal adenocarcinoma and lung carcinoma. Porimin is a single-pass membrane protein that causes oncotic cell death by rapidly mediating pore formation on the plasma membrane. Porimin-mediated cell death is usually preceded by cell aggregation and the appearance of membrane blebs. Porimin may also play a role in the inhibition of cell adhesion.

## REFERENCES

- Zhang, C., et al. 1998. A cell surface receptor defined by a mAb mediates a unique type of cell death similar to oncosis. *Proc. Natl. Acad. Sci. USA* 95: 6290-6295.
- Jansen, B.J., et al. 2001. Serial analysis of gene expression in differentiated cultures of human epidermal keratinocytes. *J. Invest. Dermatol.* 116: 12-22.
- Ma, F., et al. 2001. Molecular cloning of Porimin, a novel cell surface receptor mediating oncotic cell death. *Proc. Natl. Acad. Sci. USA* 98: 9778-9783.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606356. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Bonkobara, M., et al. 2003. Identification of novel genes for secreted and membrane-anchored proteins in human keratinocytes. *Br. J. Dermatol.* 148: 654-664.

## CHROMOSOMAL LOCATION

Genetic locus: TMEM123 (human) mapping to 11q22.2.

## SOURCE

Porimin (D-9) is a mouse monoclonal antibody raised against amino acids 1-166 representing full length Porimin of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## 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

Porimin (D-9) is recommended for detection of Porimin of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Porimin siRNA (h): sc-61383, Porimin shRNA Plasmid (h): sc-61383-SH and Porimin shRNA (h) Lentiviral Particles: sc-61383-V.

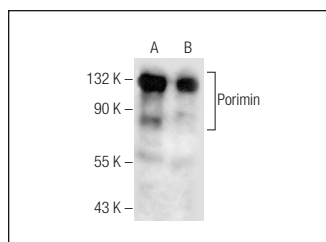
Molecular Weight of Porimin: 110 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or HL-60 whole cell lysate: sc-2209.

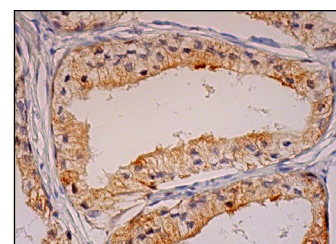
## RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



Porimin (D-9): sc-sc-377189. Western blot analysis of Porimin expression in Jurkat (A) and HL-60 (B) whole cell lysates.



Porimin (D-9): sc-377189. Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing membrane and cytoplasmic staining of glandular cells.

## PROTOCOLS

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