SANTA CRUZ BIOTECHNOLOGY, INC.

Porimin (m): 293T Lysate: sc-122710

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

1. Zhang, C., Xu, Y., Gu, J. and Schlossman, S.F. 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.
2. Jansen, B.J., van Ruissen, F., de Jongh, G., Zeeuwen, P.L. and Schalkwijk, J. 2001. Serial analysis of gene expression in differentiated cultures of human epidermal keratinocytes. J. Invest. Dermatol. 116: 12-22.
3. Ma, F., Zhang, C., Prasad, K.V., Freeman, G.J. and Schlossman, S.F. 2001. Molecular cloning of Porimin, a novel cell surface receptor mediating oncotic cell death. Proc. Natl. Acad. Sci. USA 98: 9778-9783.
4. 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/
5. Bonkobara, M., Das, A., Takao, J., Cruz, P.D. and Ariizumi, K. 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 (mouse) mapping to 9 A1.

PRODUCT

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

APPLICATIONS

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

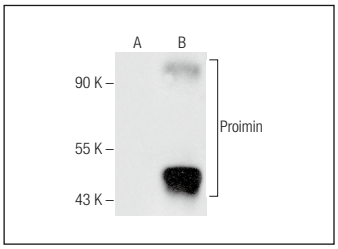
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Porimin (G-2): sc-377295 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Porimin expression in Porimin 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



Porimin (G-2): sc-377295. Western blot analysis of Porimin expression in non-transfected: sc-117752 (**A**) and mouse Porimin transfected: sc-122710 (**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.