SANTA CRUZ BIOTECHNOLOGY, INC.

Porimin (S-14): sc-49084



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

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- 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.
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- 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 (human) mapping to 11q22.1; Tmem123 (mouse) mapping to 9 A1.

SOURCE

Porimin (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Porimin of mouse 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-49084 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Porimin (S-14) is recommended for detection of Porimin of mouse and rat origin by Western Blotting (starting dilution 1:200, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Porimin siRNA (m): sc-61384, Porimin shRNA Plasmid (m): sc-61384-SH and Porimin shRNA (m) Lentiviral Particles: sc-61384-V.

Molecular Weight of Porimin: 110 kDa.

Positive Controls: Porimin (m): 293T Lysate: sc-122710.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Porimin (S-14): sc-49084. 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 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

MONOS Satisfation Guaranteed Try Porimin (G-2): sc-377295, our highly recommended monoclonal alternative to Porimin (S-14).