SANTA CRUZ BIOTECHNOLOGY, INC.

PIG-Z (N-16): sc-99594

BACKGROUND

Several cell surface proteins are attached to the membrane through their C-terminal domain and a glycosylphosphatidylinositol (GPI) moiety. Phosphatidylinositol-glycans (PIGs) are multi-pass transmembrane proteins that localize to the endoplasmic reticulum. PIGs are crucial for the synthesis of very early intermediates in GPI-anchor biosynthesis. PIG-Z (phosphatidylinositol-glycan biosynthesis class Z protein), also known as GPI mannosyltransferase 4 and SMP3, is a 579 amino acid endoplasmic reticular protein that transfers the fourth mannose to some trimannosyl-GPIs during GPI precursor assembly. Since the presence of a fourth mannose in GPI is rarely detected, it is likely that it only exists in certain tissues. PIG-Z is widely expressed at very low levels, with highest expression in colon and brain.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PIGZ (human) mapping to 3q29; Pigz (mouse) mapping to 16 B2.

SOURCE

PIG-Z (N-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of PIG-Z of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-99594 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PIG-Z (N-16) is recommended for detection of PIG-Z of mouse 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 PIG family members.

PIG-Z (N-16) is also recommended for detection of PIG-Z in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for PIG-Z siRNA (h): sc-78225, PIG-Z siRNA (m): sc-152260, PIG-Z shRNA Plasmid (h): sc-78225-SH, PIG-Z shRNA Plasmid (m): sc-152260-SH, PIG-Z shRNA (h) Lentiviral Particles: sc-78225-V and PIG-Z shRNA (m) Lentiviral Particles: sc-152260-V.

Molecular Weight of PIG-Z: 63 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.

RESEARCH USE

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

PROTOCOLS

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