

PIG-N (N-20): sc-85104

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 N-acetylglucosaminyl-phosphatidylinositol, a very early intermediate in GPI-anchor biosynthesis. PIGs play a role in the recognition of either the GPI attachment signal or the lipid portion of GPI. PIG-N (phosphatidylinositol-glycan biosynthesis class N protein), also known as GPI ethanolamine phosphate transferase 1 and MCD4 homolog, is a 931 amino acid enzyme of the endoplasmic reticulum that transfers ethanolamine phosphate to the first α -1,4-linked mannose of the glycosylphosphatidylinositol precursor of GPI-anchor. The gene encoding PIG-N is localized near a region of human chromosome 18 that may be implicated in chronic recurrent multifocal osteomyelitis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PIGN (human) mapping to 18q21.33; Pign (mouse) mapping to 1 E2.1.

SOURCE

PIG-N (N-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of PIG-N of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-85104 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PIG-N (N-20) is recommended for detection of PIG-N 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 PIG family members.

PIG-N (N-20) is also recommended for detection of PIG-N in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PIG-N siRNA (h): sc-76136, PIG-N siRNA (m): sc-152254, PIG-N shRNA Plasmid (h): sc-76136-SH, PIG-N shRNA Plasmid (m): sc-152254-SH, PIG-N shRNA (h) Lentiviral Particles: sc-76136-V and PIG-N shRNA (m) Lentiviral Particles: sc-152254-V.

Molecular Weight of PIG-N: 106 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.