

PIG-C (N-15): sc-54303

BACKGROUND

Phosphatidylinositol-glycans (PIGs) are multi-pass transmembrane proteins that localize to the endoplasmic reticulum. PIGs exhibit various functions but all are crucial for the biosynthesis of the glycosylphosphatidylinositol (GPI)-anchor. Some PIG proteins are components of the GPI transamidase complex and play a role in the recognition of either the GPI attachment signal or the lipid portion of GPI. Other PIGs belong to the glycosyltransferase complex (GPI-N-acetylglucosaminyltransferase or GPI-GnT) and function in the transfer of N-acetylglucosamine (GlcNAc) to phosphatidylinositol (PI). A variety of other PIGs play distinct roles in GPI synthesis. PIG-C is a component of the GPI-GnT complex which is responsible for the first step in GPI synthesis, the transfer of GlcNAc to PI from UDP-GlcNAc. PIG-C may function as a scaffold protein, anchoring the complex to the ER and facilitating the interaction among other subunits. A mutation in the gene encoding PIG-C may result in the absence of GPI-anchored proteins.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PIGC (human) mapping to 1q24.3; Pigc (mouse) mapping to 1 H2.1.

SOURCE

PIG-C (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PIG-C of human origin.

PRODUCT

Each vial contains 200 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-54303 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PIG-C (N-15) is recommended for detection of PIG-C 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).

PIG-C (N-15) is also recommended for detection of PIG-C in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PIG-C siRNA (h): sc-72357, PIG-C siRNA (m): sc-72358, PIG-C shRNA Plasmid (h): sc-72357-SH, PIG-C shRNA Plasmid (m): sc-72358-SH, PIG-C shRNA (h) Lentiviral Particles: sc-72357-V and PIG-C shRNA (m) Lentiviral Particles: sc-72358-V.

Molecular Weight of PIG-C: 34 kDa.

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) 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.

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.