SANTA CRUZ BIOTECHNOLOGY, INC.

PIG-B (C-16): sc-54298

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 and function in the transfer of N-acetylglucosamine (GlcNAc) to phosphatidylinositol (PI). A variety of other PIGs play distinct roles in GPI synthesis including mannosylation of the GPI-anchor. PIG-B, an α1,2-mannosyltransferase, is also referred to as GPI mannosyltransferase III (GPI-MT-III). It is responsible for adding the third mannose in the synthesis of the GPI anchor. PIG-B transfers the mannose from dolichol-phosphate-mannose (Dol-P-Man) and for this reason, it is a member of the Dol-P-Man-dependent mannosyltransferase family.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PIGB (human) mapping to 15q21.3; Pigb (mouse) mapping to 9 D.

SOURCE

PIG-B (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PIG-B of human 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-54298 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PIG-B (C-16) is recommended for detection of PIG-B 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-B (C-16) is also recommended for detection of PIG-B in additional species, including equine.

Suitable for use as control antibody for PIG-B siRNA (h): sc-72355, PIG-B siRNA (m): sc-72356, PIG-B shRNA Plasmid (h): sc-72355-SH, PIG-B shRNA Plasmid (m): sc-72356-SH, PIG-B shRNA (h) Lentiviral Particles: sc-72355-V and PIG-B shRNA (m) Lentiviral Particles: sc-72356-V.

Molecular Weight of PIG-B: 65 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.