PIG-W (P-13): sc-165248



The Power to Question

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-W (phosphatidylinositol-glycan biosynthesis class W protein) is a 504 amino acid multi-pass membrane protein that functions in the third step pf GPI biosynthesis and acylates the inositol ring of phosphatidylinositol.

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RESEARCH USE

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

CHROMOSOMAL LOCATION

Genetic locus: PIGW (human) mapping to 17q12; Pigw (mouse) mapping to 11 $\rm C$.

SOURCE

PIG-W (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PIG-W 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-165248 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PIG-W (P-13) is recommended for detection of PIG-W 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.

Suitable for use as control antibody for PIG-W siRNA (h): sc-93698, PIG-W siRNA (m): sc-152257, PIG-W shRNA Plasmid (h): sc-93698-SH, PIG-W shRNA Plasmid (m): sc-152257-SH, PIG-W shRNA (h) Lentiviral Particles: sc-93698-V and PIG-W shRNA (m) Lentiviral Particles: sc-152257-V.

Molecular Weight of PIG-W: 57 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) 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.

PROTOCOLS

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