SANTA CRUZ BIOTECHNOLOGY, INC.

PIG-X (L-15): sc-100097

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The Power to Question

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-X (phosphatidylinositol-glycan biosynthesis class X protein) is a 258 amino acid endoplasmic reticular protein that, along with PIG-M, is an essential component of GPI-mannosyltransferase 1, an enzyme that transfers the first of the four mannoses in the GPI-anchor precursors. Due to evidence showing that expression of PIG-M was very low in the absence of coexpressed PIG-X, it is likely that PIG-X stabilizes PIG-M. There are two isoforms of PIG-X that are produced as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PIGX (human) mapping to 3q29; Pigx (mouse) mapping to 16 B2.

SOURCE

PIG-X (L-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PIG-X 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-100097 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PIG-X (L-15) is recommended for detection of PIG-X of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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.

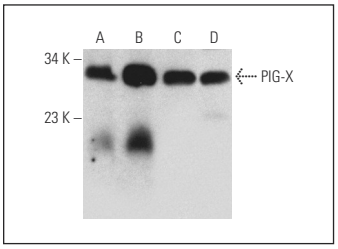
PIG-X (L-15) is also recommended for detection of PIG-X in additional species, including equine and bovine.

Suitable for use as control antibody for PIG-X siRNA (h): sc-78258, PIG-X siRNA (m): sc-152258, PIG-X shRNA Plasmid (h): sc-78258-SH, PIG-X shRNA Plasmid (m): sc-152258-SH, PIG-X shRNA (h) Lentiviral Particles: sc-78258-V and PIG-X shRNA (m) Lentiviral Particles: sc-152258-V.

Molecular Weight of PIG-X: 29 kDa.

Positive Controls: LADMAC whole cell lysate: sc-364189, WI-38 whole cell lysate: sc-364260 or mouse brain extract: sc-2253.

DATA



PIG-X (L-15): sc-100097. Western blot analysis of PIG-X expression in mouse prostate (**A**) and mouse brain (**B**) tissue extracts and LADMAC (**C**) and WI 38 (**D**) whole cell lysates.

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.