

PMM2 (C-15): sc-168977

BACKGROUND

PMM2 (phosphomannomutase 2), also known as CDG1, CDGS or CDG1a, is a 246 amino acid protein that belongs to the eukaryotic PMM family. Localizing to cytoplasm, PMM2 encodes phosphomannomutase (PMM), an enzyme necessary for the synthesis of GDP-mannose. PMM2 mutations may cause defects in glycoprotein biosynthesis, which manifests as the congenital disorder carbohydrate-deficient glycoprotein syndrome type I. This syndrome is an autosomal recessive disorder characterized by severe encephalopathy with axial hypotonia, abnormal eye movement, pronounced psychomotor retardation, peripheral neuropathy, cerebellar hypoplasia and retinitis pigmentosa. Peculiar distribution of subcutaneous fat, nipple retraction and hypogonadism are also exhibited. The gene that encodes PMM2 maps to human chromosome 16p13.2.

CHROMOSOMAL LOCATION

Genetic locus: PMM2 (human) mapping to 16p13.2; Pmm2 (mouse) mapping to 16 A1.

SOURCE

PMM2 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PMM2 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-168977 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

PMM2 (C-15) is recommended for detection of PMM2 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 PMM1.

PMM2 (C-15) is also recommended for detection of PMM2 in additional species, including equine and canine.

Suitable for use as control antibody for PMM2 siRNA (h): sc-93284, PMM2 siRNA (m): sc-152347, PMM2 shRNA Plasmid (h): sc-93284-SH, PMM2 shRNA Plasmid (m): sc-152347-SH, PMM2 shRNA (h) Lentiviral Particles: sc-93284-V and PMM2 shRNA (m) Lentiviral Particles: sc-152347-V.

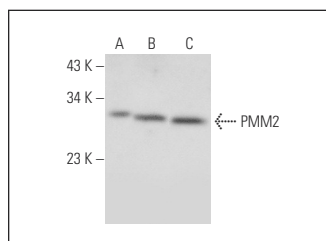
Molecular Weight of PMM2: 28 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, K-562 whole cell lysate: sc-2203 or HL-60 whole cell lysate: sc-2209.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



PMM2 (C-15): sc-168977. Western blot analysis of PMM2 expression in MCF7 (A), K-562 (B) and HL-60 (C) whole cell lysates.

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.



Try **PMM2 (2A5): sc-517179**, our highly recommended monoclonal alternative to PMM2 (C-15).