SANTA CRUZ BIOTECHNOLOGY, INC.

PYGB/M (17B6): sc-51923

BACKGROUND

Glycolysis is an evolutionarily conserved series of ten chemical reactions that utilizes eleven enzymes to concomitantly generate pyruvate and ATP from glucose. Phospho-fructose kinase-2/fructose 2,6-bisphosphatase (PFK-2) stimulates the synthesis and degradation of fructose 2,6-bisphosphate. Glycogen phosphorylase (also known as GP) is an allosteric enzyme important in carbohydrate metabolism. Its activity is regulated through either noncovalent binding of metabolites or by covalent modification. Glycogen phosphorylase catalyzes the phosphorylation of glycogen to Glc-1-P. There are three genes which encode the brain, liver and muscle forms of glycogen phosphorylase, PYGB, PYGL and PYGM. Because of its fundamental role in the metabolism of glycogen, glycogen phosphorylase has been a target for the design of inhibitory compounds, which could be valuable in the therapeutic treatment of type 2 diabetes mellitus.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PYGB (human) mapping to 20p11.21, PYGM (human) mapping to 11q13.1.

SOURCE

PYGB/M (17B6) is a mouse monoclonal antibody raised against brain glycogen phosphorylase of human origin.

PRODUCT

Each vial contains 50 µg IgG_1 in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

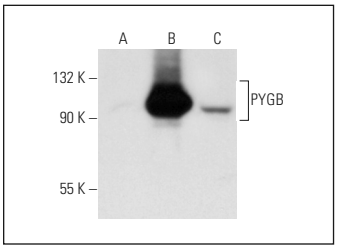
APPLICATIONS

PYGB/M (17B6) is recommended for detection of PYGB and PYGM of 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

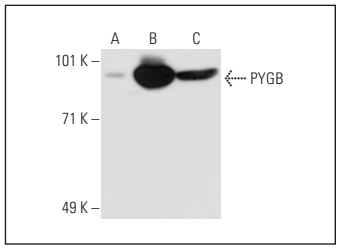
Molecular Weight of PYGB/M: 97 kDa.

Positive Controls: PYGB (h): 293T Lysate: sc-170275, Hep G2 cell lysate: sc-2227 or A-673 cell lysate: sc-2414.

DATA



PYGB/M (17B6): sc-51923. Western blot analysis of PYGB expression in non-transfected 293T: sc-117752 (**A**), human PYGB transfected 293T: sc-170275 (**B**) and A-673 (**C**) whole cell lysates.



PYGB/M (17B6): sc-51923. Western blot analysis of PYGB expression in non-transfected 293T: sc-117752 (**A**), human PYGB transfected 293T: sc-113669 (**B**) and Hep G2 (**C**) 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 for detailed protocols and support products.