

PRODUCT DATA SHEET

Bioworld Technology,Inc.

PKM1/PKM2 (28-4-11) monoclonal antibody

Catalog: BS66500 Host: Mouse Reactivity: Human, Rat, Mouse

BackGround:

Pyruvate kinase is a glycolytic enzyme that catalyses the conversion of phosphoenolpyruvate to pyruvate. In mammals, the M1 isoform (PKM1) is expressed in most adult tissues. The M2 isoform (PKM2) is an alternatively spliced variant of M1 that is expressed during embryonic development. Research studies found that cancer cells exclusively express PKM2. PKM2 is shown to be essential for aerobic glycolysis in tumors, known as the Warburg effect. When cancer cells switch from the M2 isoform to the M1 isoform, aerobic glycolysis is reduced and oxidative phosphorylation is increased. These cells also show decreased tumorigenicity in mouse xenografts. Recent studies showed that PKM2 is not essential for all tumor cells. In the tumor model studied, PKM2 was found to be active in the non-proliferative tumor cell population and inactive in the proliferative tumor cell population.

Product:

Mouse IgG, 0.4mg/ml in PBS with 0.05% Proclin300, 50% glycerol, 0.2% BSA, pH7.2.

Molecular Weight:

~ 65 kDa

Swiss-Prot:

P14618

Purification&Purity:

The antibody was affinity-purified from cell culture supernatant by protein A+G and the purity is > 95% (by SDS-PAGE).

Applications:

WB: 1:1000~1:2000 IP: 1:50~1:200

Storage&Stability:

Store at $4\,\mathrm{C}$ short term. Aliquot and store at $-20\,\mathrm{C}$ long term. Avoid freeze-thaw cycles.

Specificity:

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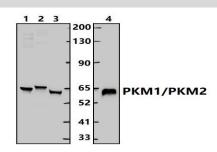
Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841 PKM1/PKM2(28-4-11) polyclonal antibody detects endogenous levels of PKM1/PKM2 protein.

DATA:



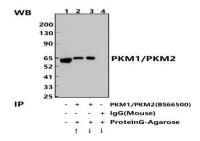
Western blot (WB) analysis of PKM1/PKM2(28-4-11) monoclonal antibody at 1:1000 dilution

Lane1:PKM1 recombinant protein(0.2ug)

Lane2:PKM2 recombinant protein(0.2ug)

Lane3:A549 whole cell lysate(30ug)

Lane4:The Muscle tissue lysate of Mouse(30ug)



Immunoprecipitation of A549 cell lysates using PKM1/PKM2 mAb (Sepharose Bead Conjugate) #BD0048(lane 2 and lane 3) and Nonspecific IgG Control (Sepharose Bead Conjugate)#BD0048 (lane 4) .Lane 1 is 30% input. The western blot was probed using PKM1/PKM2 mAb. "↑" (supernatant); "↓" (deposition)

Note:

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

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