

# PRODUCT DATA SHEET

Bioworld Technology,Inc.

# PKM1 (19-2-7) monoclonal antibody

Catalog: BS66504 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, 1.4mg/ml in PBS with 0.05% Proclin300, 50% glycerol, 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: 1:500~1:1000

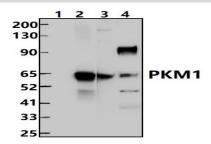
## Storage&Stability:

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

# **Specificity:**

PKM1(19-2-7) polyclonal antibody detects endogenous levels of PKM1 protein.

## **DATA:**



Western blot (WB) analysis of PKM1(19-2-7) monoclonal antibody at

1:500 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)

#### Note:

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

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