Data Sheet (Cat.No.TMAB-03190)

Anti-BPGM Polyclonal Antibody

Product Details

Ig Type:	IgG
Reactivity:	Human,Mouse,Rat (predicted:Cow,Rabbit,Sheep)
Molecular Weight:	Theoretical: 30 kDa. Actual: 30 kDa.
Purification:	Protein A purified

Applications

Verified Activity:	Sample: Lane 1: Mouse NIH/3T3 cell lysates Lane 2: Rat Placenta tissue lysates Lane 3: Rat Kidney tissue lysates Lane 4: Human Jurkat cell lysates Lane 5: Human 293T cell lysates Primary: Anti-BPGM (TMAB-03190) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 30 kDa Observed band size: 30 kDa
Application:	WB
Recommended	WB: 1:500-2000

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	KLH conjugated synthetic peptide: human BPGM
Antigen Species:	Human
Gene ID:	669
Uniprot ID:	P07738

Research Background

BPGM (2,3-bisphosphoglycerate mutase) is a 259 amino acid protein that belongs to the phosphoglycerate mutase family and exists as a homodimer that plays a crucial role in the regulation of hemoglobin oxygen. Specifically, BPGM catalyzes the conversion of 3-phospho-D-glyceroyl phosphate to 2,3-bisphospho-D-glycerate (2,3-BPG), a reaction that is essential for controlling the concentration of 2,3-BPG within the cell. The gene encoding BPGM maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to Osteogenesis imperfecta, Williams-Beuren syndrome, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome.
Involvement in disease:
Defects in BPGM are the cause of bisphosphoglycerate mutase deficiency (BPGMD) . A disease characterized by

hemolytic anemia, splenomegaly, cholelithiasis and cholecystitis.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481