PGK1 (Phospho-Ser203) Antibody

#58025

Number: 58025

Amount: 100μg/100μl

Form of Antibody: Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl,0.02% sodium azide and 50% glycerol.

Storage/Stability: Store at -20℃/1 year

Immunogen: synthetic phosphopeptide corresponding to residues surrounding Ser203 of human PGK1

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phospholation site.

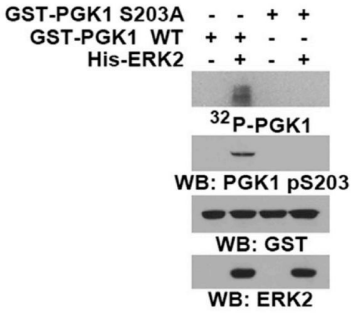
Specificity/Sensitivity: PGK1（Phospho-Ser203)antibody detects endogenous levels of PGK1 only when phospholated at Serine203 .

Reactivity: Human

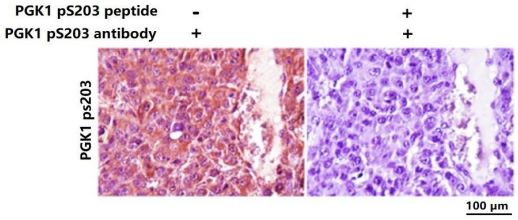
Applications:

Predicted MW: 43KD

WB **:**1:500~1:1000 IHC:1:50-200



In vitro kinase assays were carried out by mixing purified active ERK2 with purified WT GST-PGK1 or GST-PGK1 S203A in the presence of [γ -32P] ATP. The reaction mixture was separated for autoradiography and immunoblotting analyses.



IHC analyses of human GBM tissues were performed with the indicated antibodies in the presence or absence of specific blocking peptides. Scale bar, 100 μm.

Background :Hypoxia, EGFR activation, and expression of K-Ras G12V and B-Raf V600E induce mitochondrial translocation of phosphoglycerate kinase 1 (PGK1). This is mediated by ERK-dependent PGK1 S203 phosphorylation and subsequent PIN1-mediated cis-trans isomerization. PGK1 S203 phosphorylation levels correlate with poor prognosis in glioblastoma patients [1] .

Reference:[1] Li X, Jiang Y, Meisenhelder J, Yang W, Hawke DH, Zheng Y, Xia Y, Aldape K, He J, Hunter T, Wang L, Lu Z. Mitochondria-Translocated PGK1 Functions as a Protein Kinase to Coordinate Glycolysis and the TCA Cycle in Tumorigenesis. ***Mol Cell.*** 2016 Mar 3;61(5):705-719. doi: 10.1016/j.molcel.2016.02.009. PMID: 26942675.