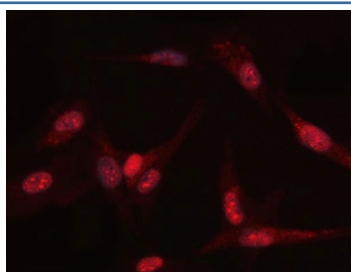


PGK Antibody / PGK1 (R31858)

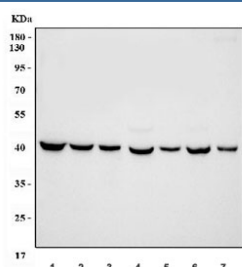
Catalog No.	Formulation	Size
R31858	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

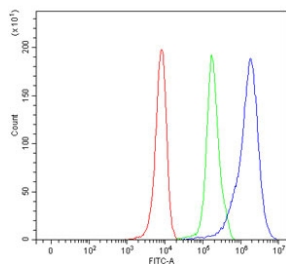
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P00558
Localization	Nuclear, cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This PGK antibody is available for research use only.



Immunofluorescent staining of FFPE human U-87 MG cells with PGK antibody. HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of 1) human HeLa 2) human HepG2, 3) human 293T, 4) rat brain, 5) rat liver, 6) mouse brain and 7) mouse liver tissue lysate with PGK antibody. Expected molecular weight ~44 kDa.



Flow cytometry testing of human 293T cells with PGK antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= PGK antibody.

Description

Phosphoglycerate Kinase 1, also known as PGKA, is an enzyme that in humans is encoded by the PGK1 gene. The protein encoded by this gene is a glycolytic enzyme that catalyzes the conversion of 1,3-diphosphoglycerate to 3-phosphoglycerate. The encoded protein may also act as a cofactor for polymerase alpha. Additionally, this protein is secreted by tumor cells where it participates in angiogenesis by functioning to reduce disulfide bonds in the serine protease, plasmin, which consequently leads to the release of the tumor blood vessel inhibitor angiostatin. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Deficiency of the enzyme is associated with a wide range of clinical phenotypes hemolytic anemia and neurological impairment. Pseudogenes of this gene have been defined on chromosomes 19, 21 and the X chromosome.

Application Notes

Optimal dilution of the PGK antibody should be determined by the researcher.

Immunogen

Amino acids MGLDCGPESKKYAEAVTRAKQIVWN of human PGK1 were used as the immunogen for the PGK antibody.

Storage

After reconstitution, the PGK antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.