

Basic Information

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| Product Name | Anti-PGK1 Antibody |
| Gene Name | PGK1 |
| Source | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Species Reactivity | human, mouse, rat |
| Tested Application | WB, IHC |
| Contents | 500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol. |
| Immunogen | A synthetic peptide corresponding to a sequence in the middle region of human PGK1, identical to the related rat and mouse sequences. |
| Concentration | 500 ug/ml |
| Purification | Immunogen affinity purified. |
| Observed MW | 45 kDa |
| Dilution Ratios | Western blot (WB): 1:500-2000 Immunohistochemistry (IHC):1:50-400 |

Storage

12 months from date of receipt, -20°C as supplied.

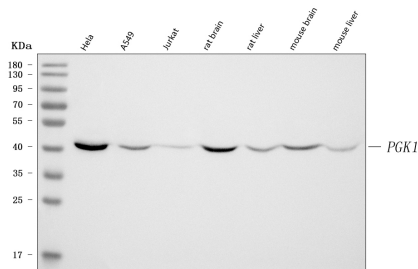
Background Information

PGK1 (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. And 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.

Reference

Anti-PGK1 Antibody被引用在1文献中。

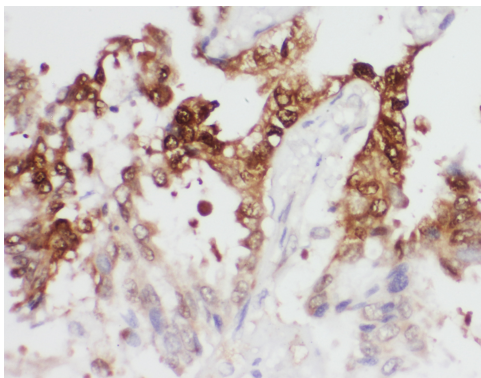
Selected Validation Data



Western blot analysis of PGK1 using anti-PGK1 antibody (BA3015-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,
Lane 2: human A549 whole cell lysates,
Lane 3: human Jurkat whole cell lysates,
Lane 4: rat brain tissue lysates,
Lane 5: rat liver tissue lysates,
Lane 6: mouse brain tissue lysates,
Lane 7: mouse liver tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-PGK1 antigen affinity purified polyclonal antibody (BA3015-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for PGK1 at approximately 45 kDa. The expected band size for PGK1 is at 45 kDa.



IHC analysis of PGK1 using anti-PGK1 antibody (BA3015-2).

PGK1 was detected in a paraffin-embedded section of human lung cancer tissue. The tissue section was incubated with rabbit anti-PGK1 Antibody (BA3015-2) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.