



G6PD Rabbit mAb

Catalog No	YP-rAb-17164
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	G6PD
Protein Name	G6PD(Glucose 6 Phosphate Dehydrogenase)
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	G6PD;G6PD(Glucose 6 Phosphate Dehydrogenase);G6PD ; Glucose-6-phosphate 1-dehydrogenase ; G6PD
Observed Band	59kD
Calculated Molecular Weight	59kD
Cell Pathway	Cytoplasm, cytosol . Membrane; Peripheral membrane protein .
Tissue Specificity	Isoform Long is found in lymphoblasts, granulocytes and sperm.
Function	Catalytic activity:D-glucose 6-phosphate + NADP(+) = D-glucono-1,5-lactone 6-phosphate + NADPH.,Disease:Defects in G6PD are the cause of chronic non-spherocytic hemolytic anemia (CNSHA) [MIM:305900]. Deficiency of G6PD is associated with hemolytic anemia in two different situations. First, in areas in which malaria has been endemic, G6PD-deficiency alleles have reached high frequencies (1% to 50%) and deficient individuals, though essentially asymptomatic in the steady state, have a high risk of acute hemolytic attacks . Secondly, sporadic cases of G6PD deficiency occur at a very low frequencies , and they usually present a more severe phenotype. Several types of CNSHA are recognized. Class-I variants are associated with severe NSHA; class-II have an activity <10% of normal; class-III have an activity of 10% to 60% of normal; class-IV have near normal activity.,Function:Produces pentose sugars for nucleic acid synthesis and main producer of NADPH reducing power.,miscellaneous:Has



NADP both as cofactor (bound to the N-terminal domain) and as structural element bound to the C-terminal domain.,online information:G6PD deficiency resource,online information:G6PD mutation database,online information:The Singapore human mutation and polymorphism database,pathway:Carbohydrate degradation; pentose phosphate pathway.,pathway:Carbohydrate degradation; pentose phosphate pathway; D-ribulose 5-phosphate from D-glucose 6-phosphate (oxidative stage): step 1/3.,polymorphism:The sequence shown is that of variant B, the most common variant.,similarity:Belongs to the glucose-6-phosphate dehydrogenase family.,subunit:Homodimer or homotetramer.,tissue specificity:The long isoform is found in lymphoblasts, granulocytes and sperm.,

Background

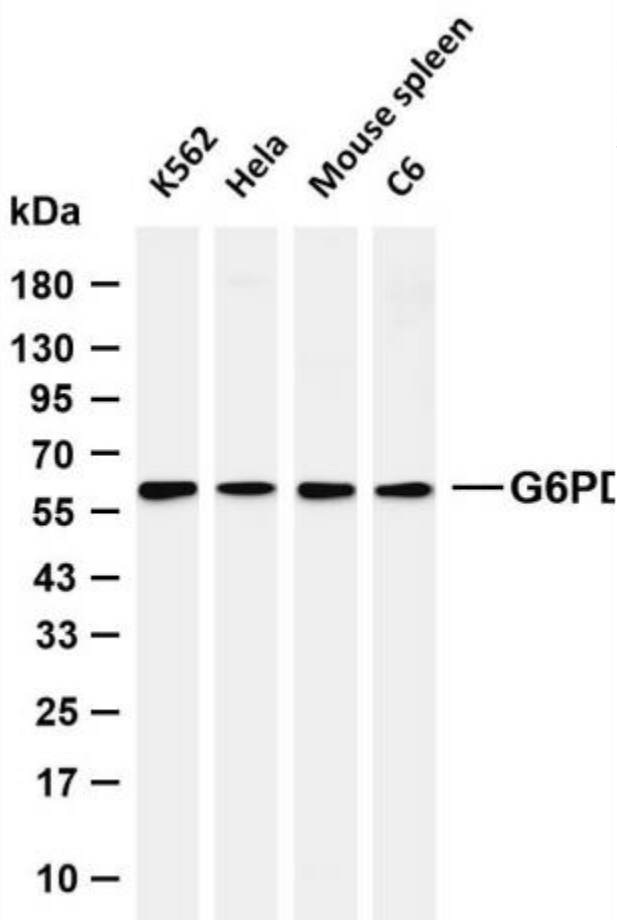
glucose-6-phosphate dehydrogenase(G6PD) Homo sapiens This gene encodes glucose-6-phosphate dehydrogenase. This protein is a cytosolic enzyme encoded by a housekeeping X-linked gene whose main function is to produce NADPH, a key electron donor in the defense against oxidizing agents and in reductive biosynthetic reactions. G6PD is remarkable for its genetic diversity. Many variants of G6PD, mostly produced from missense mutations, have been described with wide ranging levels of enzyme activity and associated clinical symptoms. G6PD deficiency may cause neonatal jaundice, acute hemolysis, or severe chronic non-spherocytic hemolytic anemia. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],

matters needing attention

Avoid repeated freezing and thawing!

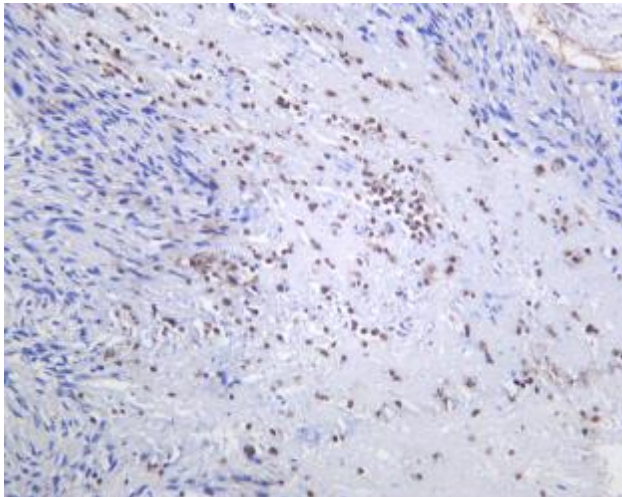
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

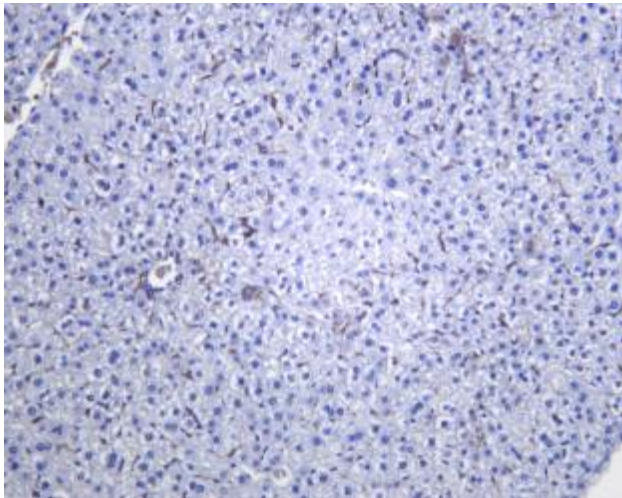


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-G6PD antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: K562 Lane 2: HeLa Lane 3: Mouse spleen Lane 4: C6 Predicted band size: 59kDa Observed band size: 59kDa





Human gastric adenocarcinoma was stained with anti-G6PD Rabbit antibody



Mouse liver was stained with anti-G6PD Rabbit antibody

