

Rabbit G6PD Polyclonal Antibody | anti-G6PD antibody

G6PD Antibody

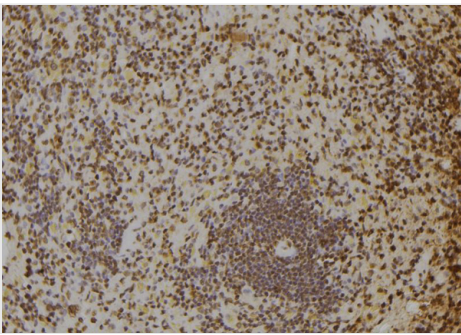
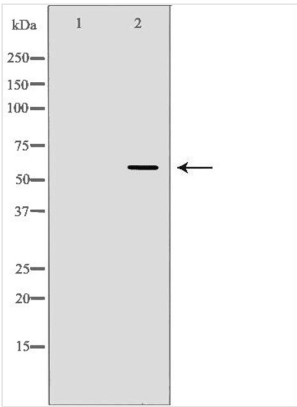
CATALOG # AAA326213	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

G6PD; Polyclonal Antibody; G6PD Antibody; G6PD_HUMAN; G6PD1; G6pdx; Glucose 6 phosphate 1 dehydrogenase; Glucose 6 phosphate dehydrogenase; Glucose-6-phosphate 1-dehydrogenase; MET19; POS10; Zwf1p; anti-G6PD antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	G6PD antibody detects endogenous levels of total G6PD
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	545
Applicable Applications for anti-G6PD antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human G6PD
Tissue Specificity	Isoform Long is found in lymphoblasts, granulocytes and sperm.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Horse, Rabbit, Dog, Xenopus
Similarity	Pig (90%), Zebrafish (90%), Bovine (90%), Horse (90%), Rabbit (90%), Dog (90%), Xenopus (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA326213 at 1/100 staining Rat spleen tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of Hela whole cell lysates, using G6PD Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-G6PD antibody

Description: Glucose-6-phosphate dehydrogenase (G6PD) catalyses the first and rate-limiting step of the pentose phosphate pathway (1). The NADPH generated from this reaction is essential to protect cells from oxidative stress (1). Recent studies have shown that p53 interacts with G6PD and inhibits its activity, therefore suppressing glucose consumption through the pentose phosphate pathway (2). In cancer cells with p53 mutations, the increased glucose consumption is directed towards increased biosynthesis, which is critical for cancer cell proliferation (2).

Function: Catalyzes the rate-limiting step of the oxidative pentose-phosphate pathway, which represents a route for the dissimilation of carbohydrates besides glycolysis. The main function of this enzyme is to provide reducing power (NADPH) and pentose phosphates for fatty acid and nucleic acid synthesis.

Subunit Structure: Homotetramer; dimer of dimers. Interacts with SIRT2; the interaction is enhanced by H2O2 treatment.

Post-translational Modifications: Acetylated by ELP3 at Lys-403; acetylation inhibits its homodimerization and enzyme activity. Deacetylated by SIRT2 at Lys-403; deacetylation stimulates its enzyme activity.

Similarity: Belongs to the glucose-6-phosphate dehydrogenase family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	109389365
NCBI GeneID	2539
NCBI Accession #	NP_000393.4
NCBI GenBank Nucleotide #	NM_000402.4
UniProt Accession #	P11413; Q16000; Q16765; Q8IU70; Q8IU88; Q8IUA6; Q96PQ2; D3DWX9
Molecular Weight	Observed: 59 kDa Predicted: 60 kDa
NCBI Official Full Name	glucose-6-phosphate 1-dehydrogenase isoform a
NCBI Official Synonym Full Names	glucose-6-phosphate dehydrogenase
NCBI Official Symbol	G6PD
NCBI Official Synonym Symbols	G6PD1
NCBI Protein Information	glucose-6-phosphate 1-dehydrogenase
UniProt Protein Name	Glucose-6-phosphate 1-dehydrogenase
UniProt Gene Name	G6PD
UniProt Synonym Gene Names	G6PD

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/g6pd-antibody-immunohistochemistry-western-blot-elisa/326213>