

**Goat Anti-G6PD (aa 308 - 320) Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1453b****Specification**

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**Goat Anti-G6PD (aa 308 - 320) Antibody - Product Information**

Application	WB, IHC, Pep-ELISA
Primary Accession	<a href="#">P11413</a>
Other Accession	<a href="#">NP_001035810</a> , <a href="#">2539</a> , <a href="#">14381 (mouse)</a> , <a href="#">24377 (rat)</a>
Reactivity	Human
Predicted	Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	59257

**Goat Anti-G6PD (aa 308 - 320) Antibody - Additional Information****Gene ID** 2539**Other Names**

Glucose-6-phosphate 1-dehydrogenase, G6PD, 1.1.1.49, G6PD

**Dilution**WB~~1:1000  
IHC~~1:100~500  
Pep-ELISA~~N/A**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-G6PD (aa 308 - 320) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-G6PD (aa 308 - 320) Antibody - Protein Information****Name** G6PD**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.

**Cellular Location**

Cytoplasm, cytosol. Membrane; Peripheral membrane protein

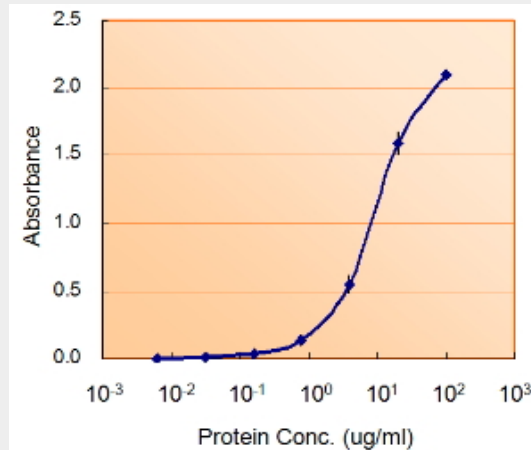
**Tissue Location**

Isoform Long is found in lymphoblasts, granulocytes and sperm

**Goat Anti-G6PD (aa 308 - 320) Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

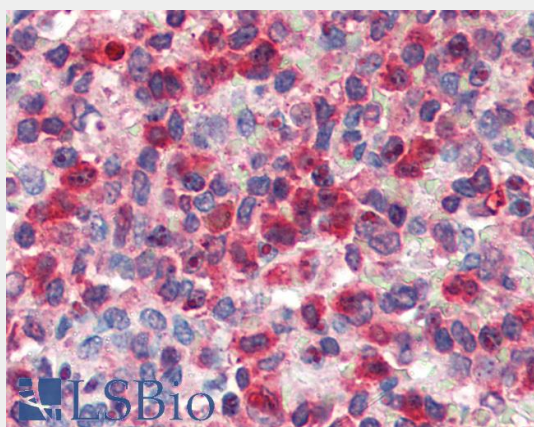
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Goat Anti-G6PD (aa 308 - 320) Antibody - Images**

AF1453b (5ug/ml) as the reporter with EB002003 as the capture rabbit antibody (5ug/ml).



AF1453b (0.03µg/ml) staining of Human Testis lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



AF1453b (2.5µg/ml) staining of paraffin embedded Human Spleen. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

#### **Goat Anti-G6PD (aa 308 - 320) Antibody - Background**

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.

#### **Goat Anti-G6PD (aa 308 - 320) Antibody - References**

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Prevalence and molecular characterization of Glucose-6-Phosphate dehydrogenase deficient variants among the Kurdish population of Northern Iraq. Al-Allawi N, et al. BMC Blood Disord, 2010 Jul 5. PMID 20602793.

A novel G473A mutation in the glucose-6-phosphate dehydrogenase gene. Chen X, et al. Pediatr Blood Cancer, 2010 Aug. PMID 20582980.

Association of G6PD with lower haemoglobin concentration but not increased haemolysis in patients with sickle cell anaemia. Nouraie M, et al. Br J Haematol, 2010 Jul. PMID 20507315.

Candidate malaria susceptibility/protective SNPs in hospital and population-based studies: the effect of sub-structuring. Eid NA, et al. Malar J, 2010 May 8. PMID 20459687.