

**Anti-G6PD Picoband Antibody**  
**Catalog # ABO11889****Specification**

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**Anti-G6PD Picoband Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB                     |
| Primary Accession | <a href="#">P11413</a> |
| Host              | Rabbit                 |
| Reactivity        | Human                  |
| Clonality         | Polyclonal             |
| Format            | Lyophilized            |

**Description**

Rabbit IgG polyclonal antibody for Glucose-6-phosphate 1-dehydrogenase(G6PD) detection. Tested with WB in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-G6PD Picoband Antibody - Additional Information**

**Gene ID** 2539

**Other Names**

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

**Calculated MW**

59257 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human<br>

**Tissue Specificity**

Isoform Long is found in lymphoblasts, granulocytes and sperm.

**Protein Name**

Glucose-6-phosphate 1-dehydrogenase

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

E.coli-derived human G6PD recombinant protein (Position: E315-L515). Human G6PD shares 95% and 96% amino acid (aa) sequences identity with mouse and rat G6PD, respectively.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Sequence Similarities**

Belongs to the glucose-6-phosphate dehydrogenase family.

**Anti-G6PD Picoband 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

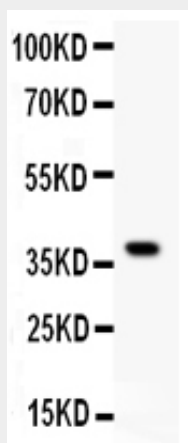
**Tissue Location**

Isoform Long is found in lymphoblasts, granulocytes and sperm

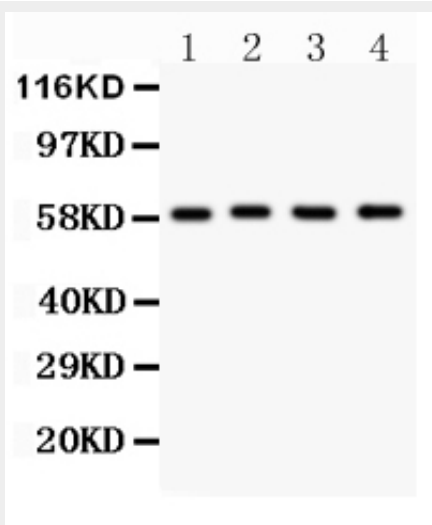
**Anti-G6PD Picoband Antibody - Protocols**

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](#)

**Anti-G6PD Picoband Antibody - Images**

Anti- G6PD antibody, ABO11889, Western blottingAll lanes: Anti G6PD (ABO11889) at 0.5ug/mlWB: Recombinant Human G6PD Protein 0.5ngPredicted bind size: 39KDObserved bind size: 39KD



Anti- G6PD antibody, ABO11889, Western blottingAll lanes: Anti G6PD (ABO11889) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: MCF-7 Whole Cell Lysate at 40ugLane 3: SKOV Whole Cell Lysate at 40ugLane 4: HEPG2 Whole Cell Lysate at 40ugPredicted bind size: 59KDObserved bind size: 59KD

#### **Anti-G6PD Picoband Antibody - Background**

Glucose-6-phosphate dehydrogenase, also known as G6PD or G6PDH, is an enzyme that in humans is encoded by the G6PD gene. It is mapped to Xq28. G6PD plays a key role in the production of ribose 5-phosphate and the generation of NADPH in the hexose monophosphate pathway. Because this pathway is the only NADPH-generation process in mature red cells, which lack the citric acid cycle, a genetic deficiency of G6PD is often associated with adverse physiologic effects. It has been found that aldosterone decreased G6PD expression and activity, resulting in increased oxidant stress and decreased nitric oxide levels, similar to what is observed in G6PD-deficient endothelial cells.