**G6PD (G-6): sc-373887**

**BACKGROUND**

Glucose-6-phosphate dehydrogenase (G6PD) plays an important role in the pentose phosphate pathway. It is a member of the glucose-6-phosphate dehydrogenase family of proteins. G6PD is an ubiquitous enzyme that produces pentose sugars for nucleic acid synthesis, but is also involved in carbohydrate degradation, as it is one of the main producers of NADPH reducing power. G6PD has NADP as a co-factor and structural element. It can be found as a homodimer or homotetramer, and is primarily detected in lymphoblasts, granulocytes and sperm. Defects in G6PD can cause chronic non-spherocytic hemolytic anemia (CNSHA), especially in areas in which malaria is an epidemic. Individuals with a high level of G6PD-deficiency are at higher risk of acute hemolytic attacks.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: G6PD (human) mapping to Xq7.3.

**SOURCE**

G6PD (G-6) is a mouse monoclonal antibody raised against amino acids 356-515 mapping at the C-terminus of G6PD of human origin.

**PRODUCT**

Each vial contains 200 µg IgGκ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

G6PD is recommended for detection of G6PD of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of G6PD: 58 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, DU 145 cell lysate: sc-2268 or MDA-MB-231 cell lysate: sc-2232.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1. Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:100000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2. Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

**DATA**

![Image](image1.png)

**SELECT PRODUCT CITATIONS**


**STORAGE**

Store at 4° C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.