

Anti-G6PD/Glucose 6 Phosphate Dehydrogenase Rabbit Monoclonal Antibody

Catalog # ABO13552

Product Information

Application	WB, IHC, IF, ICC, FC
Primary Accession	P11413
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-G6PD/Glucose 6 Phosphate Dehydrogenase Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human.

Additional Information

Gene ID	2539
Other Names	Glucose-6-phosphate 1-dehydrogenase, G6PD, 1.1.1.49, G6PD
Calculated MW	59257
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200 FC 1:100
Tissue Specificity	Isoform Long is found in lymphoblasts, granulocytes and sperm.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: ABBI-7
Immunogen	A synthesized peptide derived from human G6PD
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	G6PD
Function	Catalyzes the rate-limiting step of the oxidative pentose- phosphate pathway, which represents a route for the dissimulation 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. Also catalyzes the conversion of NAADPH, which is produced by enzymes such as DUOX1, DUOX2 and NOX5 from NAADP and promotes Ca(2+) signaling during T cell activation, back to NAADP (PubMed: 34784249).
Cellular Location	Cytoplasm, cytosol. Membrane; Peripheral membrane protein
Tissue Location	Isoform Long is found in lymphoblasts, granulocytes and sperm

Images

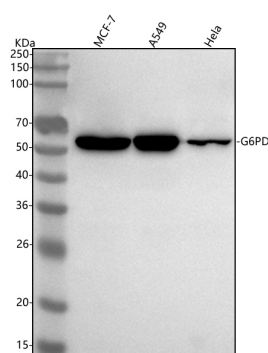


Figure 1. Western blot analysis of G6PD using anti-G6PD antibody (M00287).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human MCF-7 whole cell lysates,

Lane 2: human A549 whole cell lysates,

Lane 3: human HeLa whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-G6PD antigen affinity purified monoclonal antibody (Catalog # M00287) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:1000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for G6PD at approximately 59 kDa. The expected band size for G6PD is at 59 kDa.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.