

ARG57097 anti-G6PD antibody [2F6]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [2F6] recognizes G6PD
Tested Reactivity	Hu
Tested Application	ICC/IF, WB
Host	Mouse
Clonality	Monoclonal
Clone	2F6
Isotype	IgG2b, kappa
Target Name	G6PD
Species	Human
Immunogen	Recombinant fragment around aa. 35-506 of Human G6PD
Conjugation	Un-conjugated
Alternate Names	G6PD1; G6PD; EC 1.1.1.49; Glucose-6-phosphate 1-dehydrogenase

Application Instructions

Application table	Application	Dilution
	ICC/IF	Assay-dependent
	WB	1:1000 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

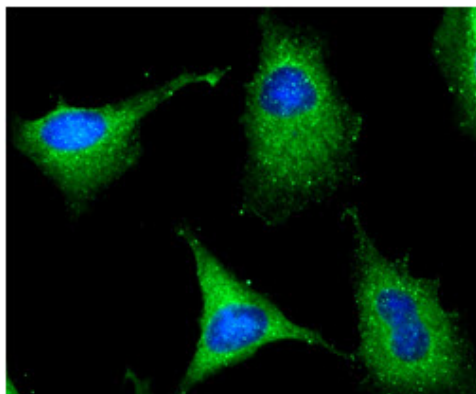
Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 10% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	10% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 2539 Human Swiss-port # P11413 Human
Gene Symbol	G6PD
Gene Full Name	glucose-6-phosphate dehydrogenase
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. [provided by RefSeq, Jul 2008]
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. [UniProt]
Highlight	Related news: Disulfidptosis markers;
Calculated Mw	59 kDa
PTM	Acetylated by ELP3 at Lys-403; acetylation inhibits its homodimerization and enzyme activity. Deacetylated by SIRT2 at Lys-403; deacetylation stimulates its enzyme activity.

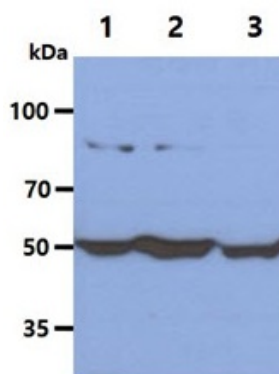
Images



ARG57097 anti-G6PD antibody [2F6] ICC/IF image

Immunofluorescence: HeLa cells line stained with ARG57097 anti-G6PD antibody [2F6] at 1:100 (Green).

DAPI (Blue) for nucleus staining.



ARG57097 anti-G6PD antibody [2F6] WB image

Western blot: 40 µg of 1) MCF, 2) HeLa, and 3) Jurkat cell lysates stained with ARG57097 anti-G6PD antibody [2F6] at 1:1000.