

Human G6PD antibody

Catalog Number: ATGA0158

PRODUCT INFORMATION

Catalog number

ATGA0158

Clone No.

AT2F6

Product type

Monoclonal Antibody

UnitProt No.

P11413

NCBI Accession No.

NP_001035810.1

Alternative Names

glucose-6-phosphate 1-dehydrogenase, G6PD1, G6PDH

PRODUCT SPECIFICATION

Antibody Host

Mouse

Reacts With

Human

Concentration

1mg/ml (determined by BCA assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

Immunogen

Recombinant human G6PD (35-506aa) purified from E. coli

Isotype

IgG2b kappa

Purification Note

By protein-G affinity chromatography

Application

ELISA, WB, ICC/IF

Usage

The antibody has been tested by ELISA, Western blot and ICC/IF analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

Storage

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Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Glucose-6-phosphate dehydrogenase (G6PD) is the rate-limiting enzyme of the pentose phosphate pathway, a metabolic pathway that supplies reducing energy to cells by maintaining the level of NADPH. G6PD converts glucose-6-phosphate into 6-phosphoglucono-delta-lactone and simultaneously produce NADPH. The NADPH in turn maintains the level of glutathione in these cells that helps protect the red blood cells against oxidative damage. G6PD deficiency cause acute hemolytic anemia.

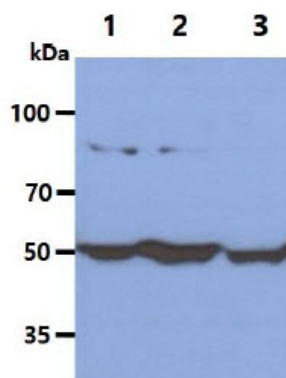
General References

Huang Y., et al, (2008) Mol Genet Metab. 93(1):44-53.

Zimny A., et al. (2003) Pol Arch Med Wewn. 110(5):1327-33.

DATA

Western blot analysis (WB)



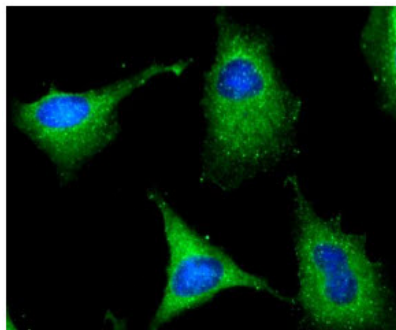
The cell lysates(40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human G6PD antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1.: MCF7 cell lysate

Lane 2.: HeLa cell lysate

Lane 3.: Jurkat cell lysate

Immunocytochemistry/Immunofluorescence (ICC/IF)



ICC/IF analysis of G6PD in HeLa cells. The cell was stained with ATGA0158 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).