Anti-Glucose 6 Phosphate Dehydrogenase Antibody [JA31-40]

ET1704-39

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IF-Cell, IHC-P, FC
Molecular Wt:	Predicted band size: 59 kDa
Clone number:	JA31-40

Description: Glucose-6-phosphate 1-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 a 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.

Immunogen: Synthetic peptide within Human Glucose 6 Phosphate Dehydrogenase aa 460-509 / 515.

Positive control: A549 cell lysate, Hela, HepG2, MCF-7, human liver tissue, human stomach cancer tissue, mouse testes tissue, mouse skeletal muscle tissue.

Subcellular location: Cytoplasm. Cytoplasmic side of plasma membrane. Membrane. Nucleus.

Database links: SwissProt: P11413 Human

Recommended Dilutions:

WB	1:500-1:2,000
IF-Cell	1:50-1:200
IHC-P	1:50-1:200
FC	1:50-1:100

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

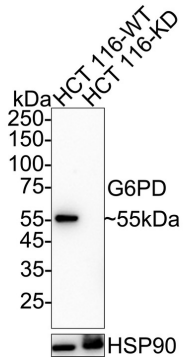

Fig1: Western blot analysis of Glucose 6 Phosphate Dehydrogenase on different lysates with Rabbit anti-Glucose 6 Phosphate Dehydrogenase antibody (ET1704-39) at 1/1,000 dilution.

Lane 1: HCT 116-si NT cell lysate
Lane 2: HCT 116-si G6PD cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 59 kDa
Observed band size: 55 kDa

Exposure time: 1 minute 40 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1704-39) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

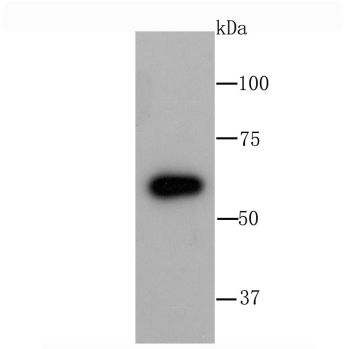

Fig2: Western blot analysis of Glucose 6 Phosphate Dehydrogenase on A549 cell lysate using anti-Glucose 6 Phosphate Dehydrogenase antibody at 1/1,000 dilution.

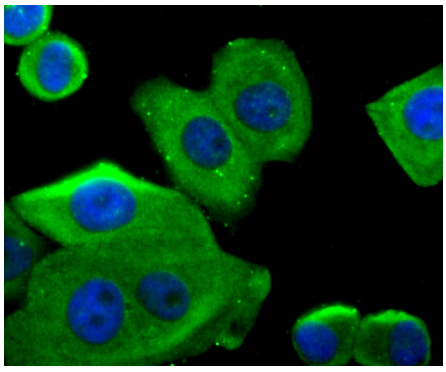

Fig3: ICC staining Glucose 6 Phosphate Dehydrogenase in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

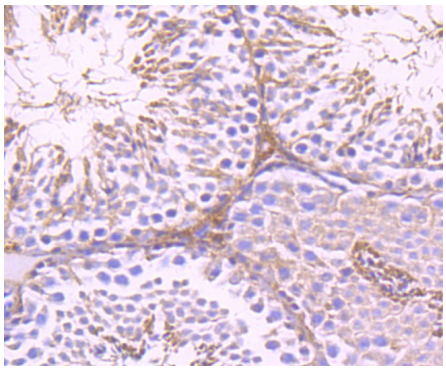

Fig4: Immunohistochemical analysis of paraffin-embedded mouse testes tissue using anti-Glucose 6 Phosphate Dehydrogenase antibody. Counter stained with hematoxylin.

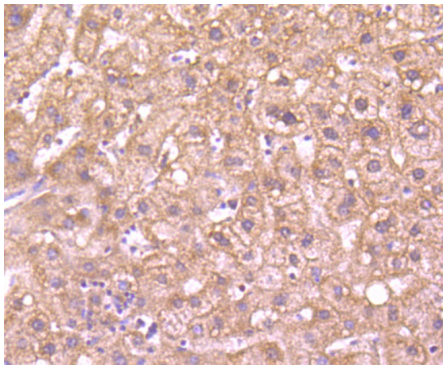

Fig5: Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-Glucose 6 Phosphate Dehydrogenase antibody. Counter stained with hematoxylin.

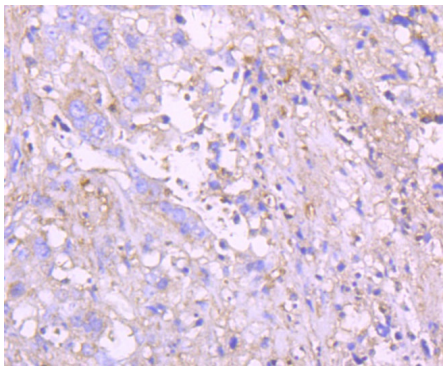

Fig6: Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue using anti-Glucose 6 Phosphate Dehydrogenase antibody. Counter stained with hematoxylin.

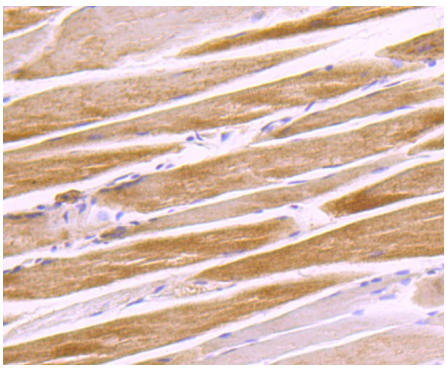

Fig7: Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue using anti-Glucose 6 Phosphate Dehydrogenase antibody. Counter stained with hematoxylin.

Background References

1. Kaneko Y et al.Oxytocin modulates GABAAR subunits to confer neuroprotection in stroke in vitro.Sci Rep