OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TA501135BM

Glucose 6 phosphate isomerase (GPI) Mouse Monoclonal Antibody (HRP conjugated) [Clone ID: OTI8G7]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI8G7
Applications:	FC, IF, IHC, WB
Recommended Dilution:	WB 1:2000, IHC 1:50, IF 1:100, Flow 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human GPI(NP_000166) produced in HEK293T cell.
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol.
Concentration:	0.5 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	HRP
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	63 kDa
Gene Name:	glucose-6-phosphate isomerase
Database Link:	NP_000166 Entrez Gene 292804 RatEntrez Gene 2821 Human P06744

View online »

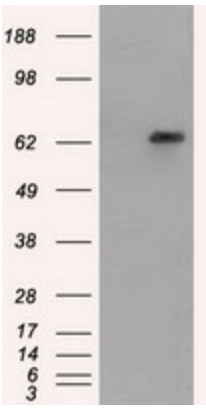
Background: This gene belongs to the GPI family whose members encode multifunctional phosphoglucose isomerase proteins involved in energy pathways. The protein encoded by this gene is a dimeric enzyme that catalyzes the reversible isomerization of glucose-6-phosphate and fructose-6-phosphate. The protein functions in different capacities inside and outside the cell. In the cytoplasm, the gene product is involved in glycolysis and gluconeogenesis, while outside the cell it functions as a neurotrophic factor for spinal and sensory neurons. Defects in this gene are the cause of nonspherocytic hemolytic anemia and a severe enzyme deficiency can be associated with hydrops fetalis, immediate neonatal death and neurological impairment.

Synonyms: AMF; GNPI; NLK; PGI; PHI; SA-36; SA36

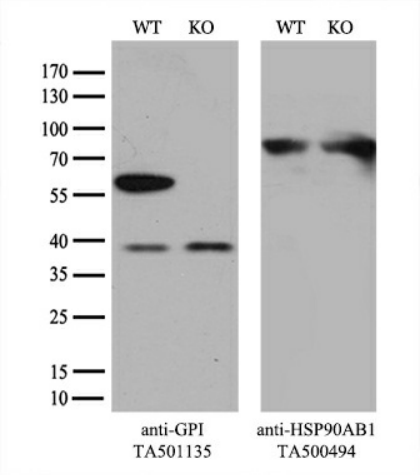
Protein Families: Druggable Genome

Protein Pathways: Amino sugar and nucleotide sugar metabolism, Glycolysis / Gluconeogenesis, Metabolic pathways, Pentose phosphate pathway, Starch and sucrose metabolism

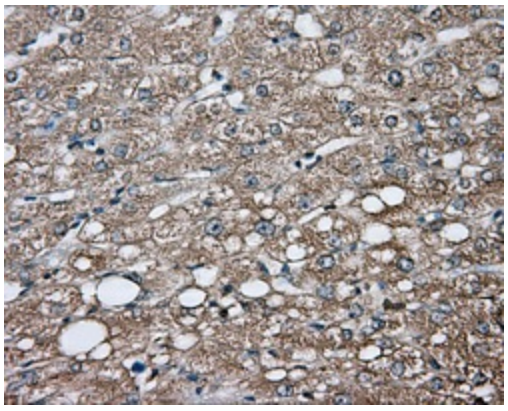
Product images:



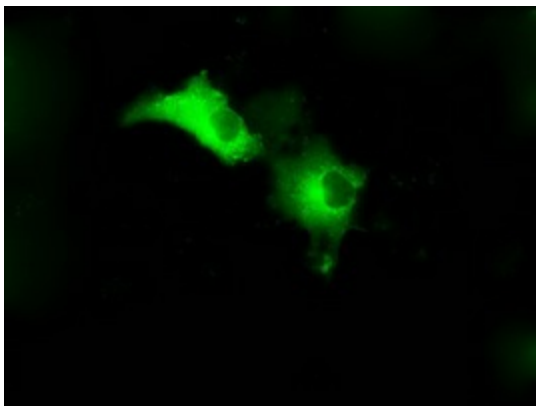
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY GPI ([RC201232], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GPI. Positive lysates [LY400066] (100ug) and [LC400066] (20ug) can be purchased separately from OriGene.



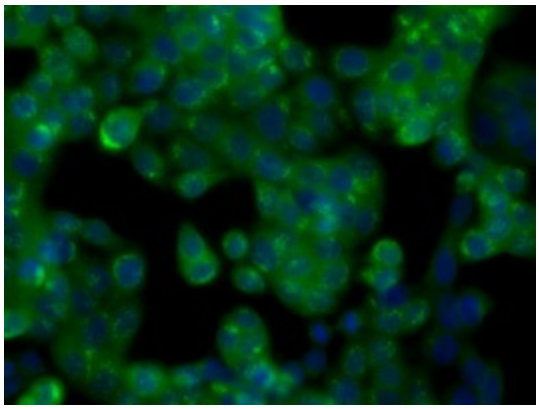
Equivalent amounts of cell lysates (10 ug per lane) of wild-type 293T cells (WT, Cat# LC810293T) and GPI-Knockout 293T cells (KO, Cat#[LC840273]) were separated by SDS-PAGE and immunoblotted with anti-GPI monoclonal antibody [TA501135] (1:500 `). Then the blotted membrane was stripped and reprobed with anti-HSP90 antibody as a loading control.



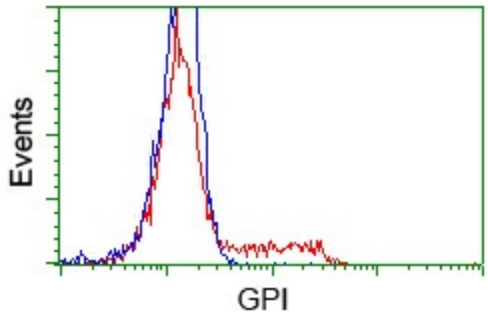
Immunohistochemical staining of paraffin-embedded liver tissue within the normal limits using anti-GPI mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501135], Dilution 1:50)



Anti-GPI mouse monoclonal antibody ([TA501135]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY GPI ([RC201232]).



Immunofluorescent staining of HT29 cells using anti-GPI mouse monoclonal antibody ([TA501135]).



HEK293T cells transfected with either pCMV6-ENTRY GPI ([RC201232]) (Red) or empty vector control plasmid (Blue) were immunostained with anti-GPI mouse monoclonal ([TA501135]), and then analyzed by flow cytometry.