ARG55368
anti-Glucose 6 phosphate isomerase antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Glucose 6 phosphate isomerase
Tested Reactivity	Hu, Ms, Rat
Predict Reactivity	Mk
Tested Application	FACS, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Glucose 6 phosphate isomerase
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 445-473 (C-terminus) of Human Glucose 6 phosphate isomerase.
Conjugation	Un-conjugated
Alternate Names	PHI; SA36; GPI; SA-36; EC 5.3.1.9; Autocrine motility factor; Neuroleukin; GNPI; PGI; Sperm antigen 36; Phosphoglucose isomerase; Glucose-6-phosphate isomerase; NLK; AMF; Phosphohexose isomerase

Application Instructions

Application table

Application	Dilution
FACS	1:10 - 1:50
WB	1:1000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	Mouse liver

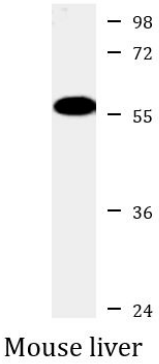
Properties

Form	Liquid
Purification	Purification with Protein A and immunogen peptide.
Buffer	PBS and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
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 or below. 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

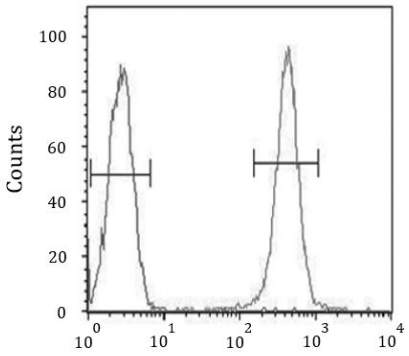
Database links	GeneID: 2821 Human GeneID: 292804 Rat Swiss-port # P06744 Human Swiss-port # Q6P6V0 Rat
Gene Symbol	GPI
Gene Full Name	glucose-6-phosphate isomerase
Background	This gene encodes a member of the glucose phosphate isomerase protein family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. In the cytoplasm, the gene product functions as a glycolytic enzyme (glucose-6-phosphate isomerase) that interconverts glucose-6-phophsate and fructose-6-phosphate. Extracellularly, the encoded protein (also referred to as neuroleukin) functions as a neurotrophic factor that promotes survival of skeletal motor neurons and sensory neurons, and as a lymphokine that induces immunoglobulin secretion. The encoded protein is also referred to as autocrine motility factor based on an additional function as a tumor-secreted cytokine and angiogenic factor. 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. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]
Function	Besides it's role as a glycolytic enzyme, mammalian GPI can function as a tumor-secreted cytokine and an angiogenic factor (AMF) that stimulates endothelial cell motility. GPI is also a neurotrophic factor (Neuroleukin) for spinal and sensory neurons. [UniProt]
Research Area	Cancer antibody; Immune System antibody; Metabolism antibody; Neuroscience antibody; Signaling Transduction antibody
Calculated Mw	63 kDa
PTM	Phosphorylation at Ser-185 by CK2 has been shown to decrease enzymatic activity and may contribute to secretion by a non-classical secretory pathway. ISGylated.
Cellular Localization	Cytoplasm. Secreted

Images



ARG55368 anti-Glucose 6 phosphate isomerase antibody WB image

Western blot: 35 µg of Mouse liver lysate stained with ARG55368 anti-Glucose 6 phosphate isomerase antibody at 1:1000 dilution.



ARG55368 anti-Glucose 6 phosphate isomerase antibody FACS image

Flow Cytometry: Ramos cells stained with ARG55368 anti-Glucose 6 phosphate isomerase antibody (right histogram) or without primary antibody control (left histogram), followed by incubation with FITC labelled secondary antibody.