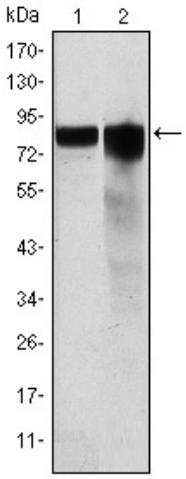
Glycogen Synthase 1 Monoclonal Antibody

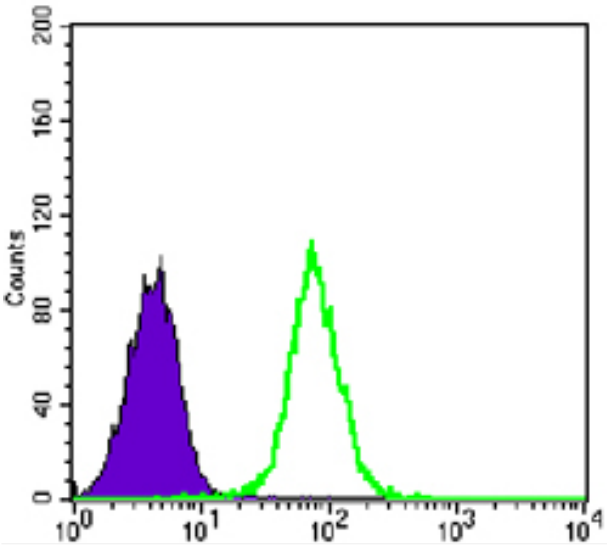
Catalog No	BYab-02327
Isotype	IgG
Reactivity	Human
Applications	WB;FCM;ELISA
Gene Name	GYS1
Protein Name	Glycogen [starch] synthase muscle
Immunogen	Purified recombinant fragment of human Glycogen Synthase 1 expressed in E. Coli.
Specificity	Glycogen Synthase 1 Monoclonal Antibody detects endogenous levels of Glycogen Synthase 1 protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	GYS1; GYS; Glycogen [starch] synthase; muscle
Observed Band	
Cell Pathway	cytosol,membrane,inclusion body,
Tissue Specificity	Endometrium,Heart,Kidney,Lymph,Muscle,Skin,
Function	catalytic activity:UDP-glucose ((1->4)-alpha-D-glucosyl)(n) = UDP + ((1->4)-alpha-D-glucosyl)(n+1).,disease:Defects in GYS1 are the cause of muscle glycogen storage disease type 0 (GSD0b) [MIM:611556]; also called muscle glycogen synthase deficiency. GSD0 is a metabolic disorder characterized by fasting hypoglycemia presenting in infancy or early childhood. The role of muscle glycogen is to provide critical energy during bursts of activity and sustained muscle work.,enzyme regulation:Allosteric activation by glucose-6-phosphate. Phosphorylation reduces the activity towards UDP-glucose. When in the non-phosphorylated state, glycogen synthase does not require glucose-6-phosphate as an allosteric activator; when phosphorylated it does.,function:Transfers the glycosyl residue from UDP-Glc to the non-reducing end of alpha-1,4-glucan.,pathway:Glycan biosynthesis; glycogen

	biosynthesis.,similar
Background	The protein encoded by this gene catalyzes the addition of glucose monomers to the growing glycogen molecule through the formation of alpha-1,4-glycoside linkages. Mutations in this gene are associated with muscle glycogen storage disease. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Sep 2009],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

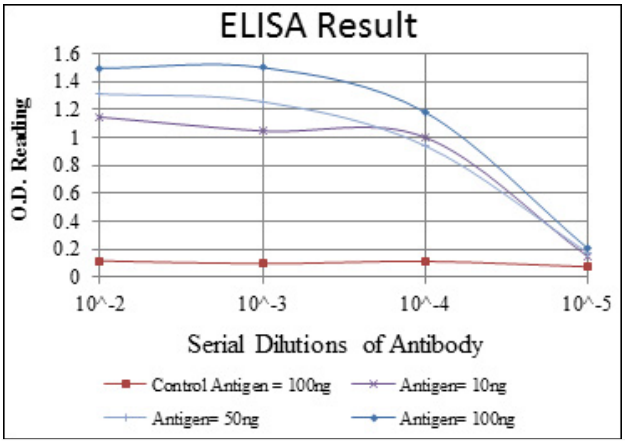
Products Images



Western Blot analysis using Glycogen Synthase 1 Monoclonal Antibody against HeLa (1) and HEK293 (2) cell lysate.



Flow cytometric analysis of K562 cells using Glycogen Synthase 1 Monoclonal Antibody (green) and negative control (purple).


ELISA Result
O.D. Reading
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
10^-2
10^-3
10^-4
10^-5
Serial Dilutions of Antibody
Control Antigen = 100ng
Antigen= 10ng
Antigen= 50ng
Antigen= 100ng