

**GYS1 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1511a****Specification****GYS1 Antibody - Product Information**

Application	E, WB, FC
Primary Accession	<a href="#">P13807</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	85kDa KDa

**Description**

Glycogen synthase, skeletal muscle, the rate limiting enzyme of the insulin-induced glycogenesis. 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. Muscle GS is expressed in several tissues.

**Immunogen**

Purified recombinant fragment of human GYS1 expressed in E. Coli.

**Formulation**

Ascitic fluid containing 0.03% sodium azide.

**GYS1 Antibody - Additional Information**

**Gene ID** 2997

**Other Names**

Glycogen [starch] synthase, muscle, 2.4.1.11, GYS1, GYS

**Dilution**

E~~1/10000  
WB~~1/500 - 1/2000  
FC~~1/200 - 1/400

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

GYS1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**GYS1 Antibody - Protein Information**

**Name** GYS1 ([HGNC:4706](#))

## Synonyms GYS

### Function

Glycogen synthase participates in the glycogen biosynthetic process along with glycogenin and glycogen branching enzyme. Extends the primer composed of a few glucose units formed by glycogenin by adding new glucose units to it. In this context, glycogen synthase transfers the glycosyl residue from UDP-Glc to the non-reducing end of alpha-1,4-glucan.

### Tissue Location

Expressed in skeletal muscle and most other cell types where glycogen is present.

## GYS1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

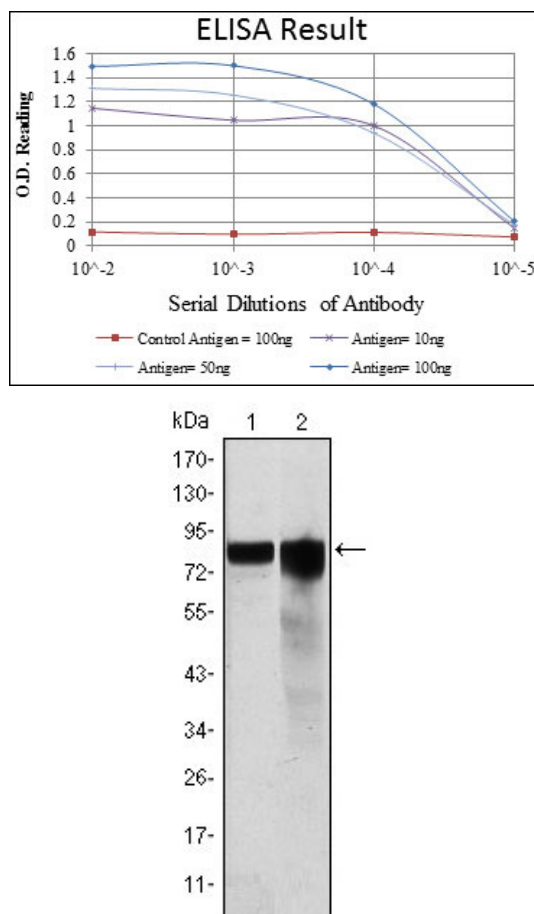


Figure 1: Western blot analysis using GYS1 mouse mAb against Hela (1) and HEK293 (2) cell lysate.

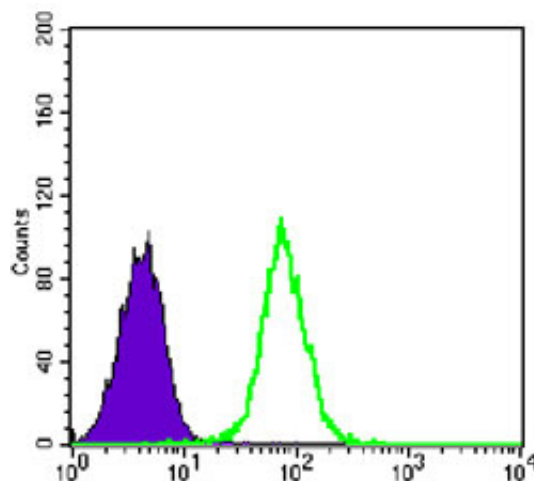


Figure 2: Flow cytometric analysis of K562 cells using GYS1 mouse mAb (green) and negative control (purple).

#### **GYS1 Antibody - References**

1. PLoS One. 2007 Mar 14;2(3):e285.
2. Mol Syst Biol. 2007;3:89. Epub 2007 Mar 13.