## For Research Use Only

# GYS1 Polyclonal antibody

Catalog Number: 10566-1-AP

Featured Product

**16 Publications** 

BC007688

2997

P13807

GeneID (NCBI):

**UNIPROT ID:** 

Full Name:



**Purification Method:** 

WB 1:1000-1:4000

protein lysate

IHC 1:50-1:500

IF 1:50-1:500

Antigen affinity purification

IP 0.5-4.0 ug for 1.0-3.0 mg of total

Recommended Dilutions:

**Basic Information** 

Catalog Number: 10566-1-AP Size:

550 µg/ml
Source:
Rabbit
Isotype:

gG glycogen synthase 1 (muscle)

Immunogen Catalog Number: Calculated

AG0857 84 kDa

Observed MW: 84 kDa

Calculated MW:

GenBank Accession Number:

Positive Controls:

WB : HeLa cells, K-562 cells, Jurkat cells, mouse skeletal muscle tissue, rat heart tissue, rat skeletal

muscle tissue

IP: mouse skeletal muscle tissue,

IHC: human liver tissue, human skeletal muscle tissue, human prostate cancer tissue

IF: HepG2 cells,

**Applications** 

Tested Applications:

FC, IF/ICC, IHC, IP, WB, ELISA

Cited Applications: WB, IF, IHC

Species Specificity: human, mouse, rat Cited Species: human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

# **Background Information**

GYS1(Glycogen [starch] synthase, muscle) is the the rate limiting enzyme of the insulin-induced glycogenesis, transferring glucose units from UDP-Glc to a glycogen primer. It catalyzes the linear addition of glucose residues to the branching structure of glycogen, providing a convenient store of glucose for times of metabolic need. This protein has 2 isoforms produced by alternative splicing.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Teresa W-M Fan	36150727	J Immunol	
Zejian Liu	36063868	Metabolism	WB
Miyuki Doi	36353228	Front Endocrinol (Lausanne)	IHC

Storage

Storage

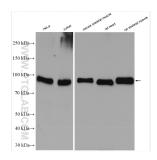
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

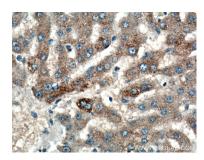
### **Selected Validation Data**



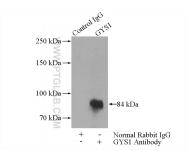
Various lysates were subjected to SDS PAGE followed by western blot with 10566-1-AP (GYS1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



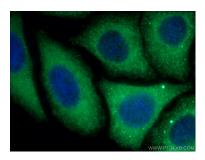
Immunohistochemical analysis of paraffinembedded human liver tissue slide using 10566-1-AP (GYS1 antibody) at dilution of 1:200 (under 10x lens)



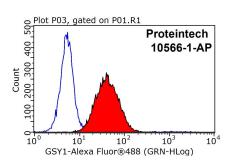
Immunohistochemical analysis of paraffinembedded human liver tissue slide using 10566-1-AP (GYS1 antibody) at dilution of 1:200 (under 40x lens)



IP result of anti-GYS1 (IP:10566-1-AP, 4ug; Detection:10566-1-AP 1:300) with mouse skeletal muscle tissue lysate 2200ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 10566-1-AP (GYS1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10^6 HepG2 cells were stained with 0.2ug GYS1 antibody (10566-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.