10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GYG1 Antibody (monoclonal) (M07)

Mouse monoclonal antibody raised against a partial recombinant GYG1.
Catalog # AT2302a

Product Information

Application	WB, IHC, E
Primary Accession	P46976
Other Accession	NM_004130
Reactivity	Human, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	3B5
Calculated MW	39384

Additional Information

Gene ID	2992
Other Names	Glycogenin-1, GN-1, GN1, GYG1, GYG
Target/Specificity	GYG1 (NP_004121, 1 a.a. ~ 73 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	GYG1 Antibody (monoclonal) (M07) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

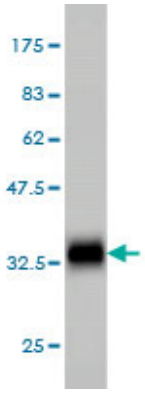
This gene encodes a member of the glycogenin family. Glycogenin is a glycosyltransferase that catalyzes the formation of a short glucose polymer from uridine diphosphate glucose in an autoglucosylation reaction. This reaction is followed by elongation and branching of the polymer, catalyzed by glycogen synthase and branching enzyme, to form glycogen. This gene is expressed in muscle and other tissues. Mutations in this gene result in glycogen storage disease XV. This gene has pseudogenes on chromosomes 1, 8 and 13 respectively. Alternatively spliced transcript variants encoding different isoforms have been identified.

References

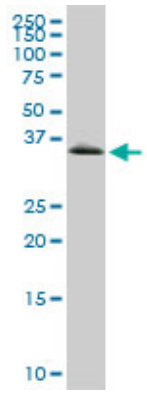
1.LC-MS/MS characterization of combined glycogenin-1 and glycogenin-2 enzymatic activities reveals their

self-glucosylation preferences.Nilsson J, Halim A, Larsson E, Moslemi AR, Oldfors A, Larson G, Nilsson JBiochim Biophys Acta. 2013 Nov 14;1844(2):398-405. doi: 10.1016/j.bbapap.2013.11.002.2.Dysregulation of multiple facets of glycogen metabolism in a murine model of pompe disease.Taylor KM, Meyers E, Phipps M, Kishnani PS, Cheng SH, Scheule RK, Moreland RJPLoS One. 2013;8(2):e56181. doi: 10.1371/journal.pone.0056181. Epub 2013 Feb 14.3.Molecular pathogenesis of a new glycogenosis caused by a glycogenin-1 mutation.Nilsson J, Halim A, Moslemi AR, Pedersen A, Nilsson J, Larson G, Oldfors A.Biochim Biophys Acta. 2011 Dec 9.

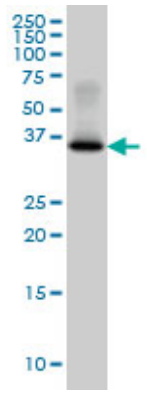
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (33.77 KDa) .



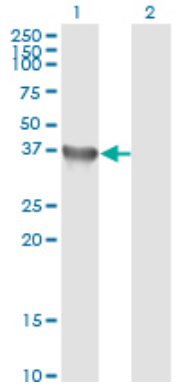
GYG1 monoclonal antibody (M07), clone 3B5. Western Blot analysis of GYG1 expression in PC-12 ((Cat # AT2302a)

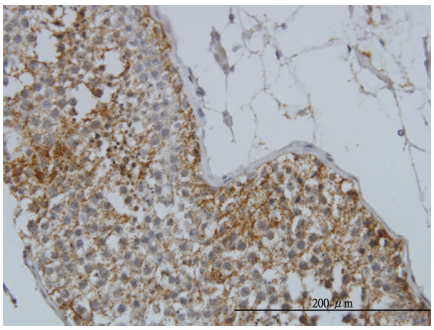


GYG1 monoclonal antibody (M07), clone 3B5 Western Blot analysis of GYG1 expression in HepG2 ((Cat # AT2302a)

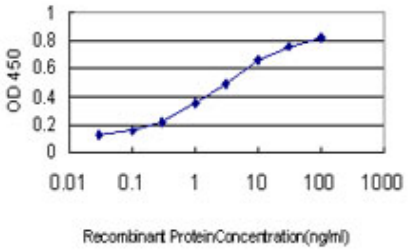
Western Blot analysis of GYG1 expression in transfected 293T cell line by GYG1 monoclonal antibody (M07), clone 3B5.

Lane 1: GYG1 transfected lysate(37.5 KDa).
Lane 2: Non-transfected lysate.





Immunoperoxidase of monoclonal antibody to GYG1 on formalin-fixed paraffin-embedded human testis. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged GYG1 is approximately 0.03ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.