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GYG1 Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22264b

Product Information

Application	WB, FC, E
Primary Accession	P46976
Other Accession	Q9R062, O08730
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB55250
Calculated MW	39384

Additional Information

Gene ID	2992
Other Names	Glycogenin-1, GN-1, GN1, 2.4.1.186, GYG1, GYG
Target/Specificity	This GYG1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 314-347 amino acids from human GYG1.
Dilution	WB~~1:2000 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GYG1 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GYG1 (HGNC:4699)
Function	Glycogenin participates in the glycogen biosynthetic process along with glycogen synthase and glycogen branching enzyme. It catalyzes the formation of a short alpha (1,4)-glucosyl chain covalently attached via a glucose 1-O-tyrosyl linkage to internal tyrosine residues and these chains act as primers for the elongation reaction catalyzed by glycogen synthase.

Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:P13280}. Nucleus {ECO:0000250|UniProtKB:P13280}. Note=Localizes to glycogen granules (glycosomes) in the cytoplasm (By similarity). Cytosolic localization is dependent on the actin cytoskeleton (By similarity) {ECO:0000250|UniProtKB:C4R941, ECO:0000250|UniProtKB:P13280}
Tissue Location	Highly expressed in skeletal muscle and heart, with lower levels in brain, lung, kidney and pancreas

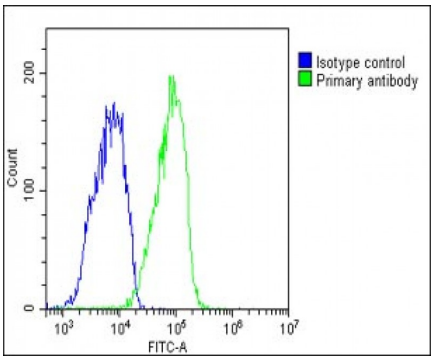
Background

Self-glucosylates, via an inter-subunit mechanism, to form an oligosaccharide primer that serves as substrate for glycogen synthase.

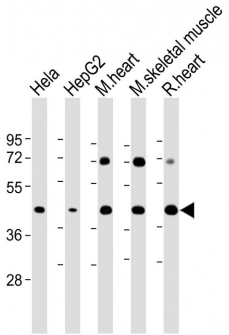
References

Barbetti F.,et al.Biochem. Biophys. Res. Commun. 220:72-77(1996).
Lomako J.,et al.Genomics 33:519-522(1996).
Leffers H.,et al.Submitted (JUN-1994) to the EMBL/GenBank/DDBJ databases.
van Maanen M.-H.,et al.Gene 234:217-226(1999).
Zhai L.,et al.Gene 242:229-235(2000).

Images



Overlay histogram showing HepG2 cells stained with AP22264b(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22264b, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



All lanes : Anti-GYG1 Antibody (C-Term) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: HepG2 whole cell lysate Lane 3: Mouse heart lysate Lane 4: Mouse skeletal muscle lysate Lane 5: Rat heart lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 39 kDa Blocking/Dilution buffer: 5% NFDM/TBST.