

Product datasheet

Anti-Glycogen synthase 1/GYS1 antibody [EP817Y] ab40810

KO VALIDATED Recombinant RabMAb

***** 6 Abreviews 19 References 3 Images

Overview		
Product name	Anti-Glycogen synthase 1/GYS1 antibody [EP817Y]	
Description	Rabbit monoclonal [EP817Y] to Glycogen synthase 1/GYS1	
Host species	Rabbit	
Tested applications	Suitable for: WB Unsuitable for: Flow Cyt (Intra) or ICC/IF	
Species reactivity	Reacts with: Human	
	Predicted to work with: Mouse, Rat	
Immunogen	Synthetic peptide within Human Glycogen synthase 1/GYS1 aa 700-800 (C terminal). The exact sequence is proprietary.	
Positive control	WB: HeLa whole cell lysate (ab150035), HEK293 cell lysate.	
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information <u>see here</u> . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb[®] patents</u> .	

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 50% Glycerol (glycerin, glycerine), 0.05% BSA, 49% PBS
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EP817Y
lsotype	lgG

Applications

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab40810 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

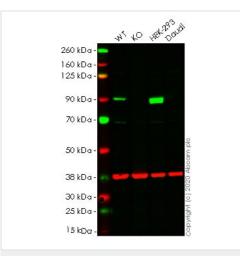
Application	Abreviews	Notes
WB	★ ★ ★ ★ ★ <u>(3)</u>	1/10000 - 1/50000. Detects a band of approximately 85 kDa (predicted molecular weight: 81 kDa).

Application notes

Is unsuitable for Flow Cyt (Intra) or ICC/IF.

Target	
Function	Transfers the glycosyl residue from UDP-Glc to the non-reducing end of alpha-1,4-glucan.
Pathway	Glycan biosynthesis; glycogen biosynthesis.
Involvement in disease	Defects in GYS1 are the cause of muscle glycogen storage disease type 0 (GSD0b) [MIM:611556]; also known as muscle glycogen synthase deficiency. GSD0b 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.
Sequence similarities	Belongs to the glycosyltransferase 3 family.

Images



Western blot - Anti-Glycogen synthase 1/GYS1 antibody [EP817Y] (ab40810) **All lanes :** Anti-Glycogen synthase 1/GYS1 antibody [EP817Y] (ab40810) at 1/10000 dilution

- Lane 1 : Wild-type HeLa lysate
- Lane 2 : Glycogen synthase 1/GYS1 knockout HeLa lysate
- Lane 3 : HEK-293 lysate
- Lane 4 : Daudi lysate

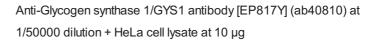
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

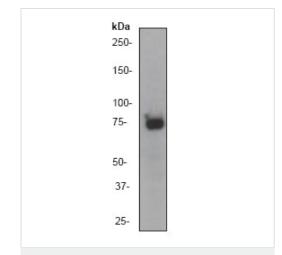
Predicted band size: 81 kDa

Lanes 1-4: Merged signal (red and green). Green - ab40810 observed at 80 kDa. Red - loading control <u>ab8245</u> observed at 37 kDa.

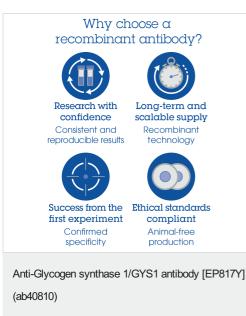
ab40810 Recombinant Anti-Glycogen synthase 1/GYS1 antibody [EP817Y] was shown to specifically react with Glycogen synthase 1/GYS1 in wild-type HeLa cells. Loss of signal was observed when knockout cell line <u>ab265388</u> (knockout cell lysate <u>ab257462</u>) was used. Wild-type and Glycogen synthase 1/GYS1 knockout samples were subjected to SDS-PAGE. ab40810 and Anti-GAPDH antibody [6C5] - Loading Control (<u>ab8245</u>) were incubated overnight at 4°C at 1 in 10000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Predicted band size: 81 kDa Observed band size: 85 kDa



Western blot - Anti-Glycogen synthase 1/GYS1 antibody [EP817Y] (ab40810)



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