

Product datasheet

Anti-Glycogen synthase 1/GYS1 (phospho S641) antibody [EP852Y] ab81230

Recombinant RabMAb

★★★★★ [5 Abreviews](#) [11 References](#) [5 Images](#)

Overview

| | |
|----------------------------|---|
| Product name | Anti-Glycogen synthase 1/GYS1 (phospho S641) antibody [EP852Y] |
| Description | Rabbit monoclonal [EP852Y] to Glycogen synthase 1/GYS1 (phospho S641) |
| Host species | Rabbit |
| Tested applications | Suitable for: Dot blot, WB, IHC-P Unsuitable for: Flow Cyt or ICC/IF |
| Species reactivity | Reacts with: Mouse, Human |
| Immunogen | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| Positive control | WB: Mouse muscle and Mouse muscle treated with AP lysates; HeLa and HeLa treated with insulin at 20 ug/mL for 15 minutes whole cell lysates. IHC: Human liver tissue. |
| General notes | <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p> |

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: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture |

| | |
|---------------------|--------------------|
| | supernatant |
| Purity | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EP852Y |
| Isotype | IgG |

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab81230 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

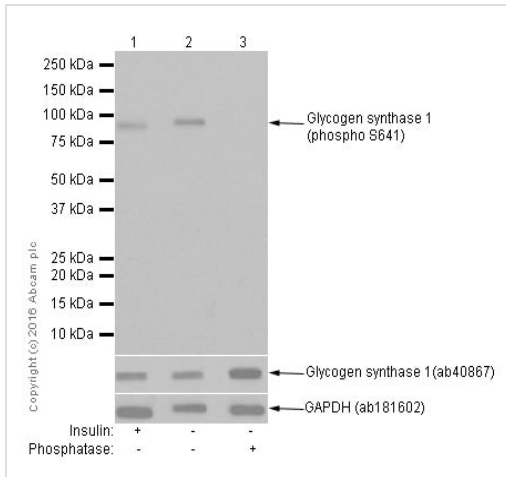
| Application | Abreviews | Notes |
|-------------|-----------|---|
| Dot blot | | 1/1000. |
| WB | ★★★★★ (3) | 1/2000 - 1/10000. Predicted molecular weight: 85 kDa. |
| IHC-P | ★★★★★ (1) | 1/100 - 1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |

Application notes Is unsuitable for Flow Cyt 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 (phospho S641) antibody [EP852Y] (ab81230)

All lanes : Anti-Glycogen synthase 1/GYS1 (phospho S641) antibody [EP852Y] (ab81230) at 1/2000 dilution

Lane 1 : HeLa (Human epithelial cell line from cervix adenocarcinoma) treated with insulin at 20 ug/mL for 15 minutes. Whole cell lysates

Lane 2 : Untreated HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysates

Lane 3 : Untreated HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysates. Then the membrane was incubated with phosphatase.

Lysates/proteins at 15 µg per lane.

Secondary

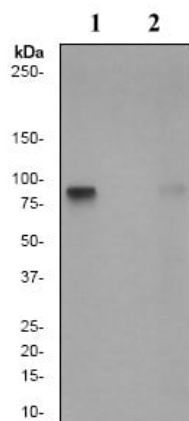
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 85 kDa

Observed band size: 85 kDa

Exposure time: 1 second

Blocking/Diluting buffer and concentration: 5% NFDN/TBST



Western blot - Anti-Glycogen synthase 1/GYS1 (phospho S641) antibody [EP852Y] (ab81230)

All lanes : Anti-Glycogen synthase 1/GYS1 (phospho S641) antibody [EP852Y] (ab81230) at 1/10000 dilution

Lane 1 : Mouse muscle tissue lysate, untreated

Lane 2 : Mouse muscle tissue lysate, treated with AP

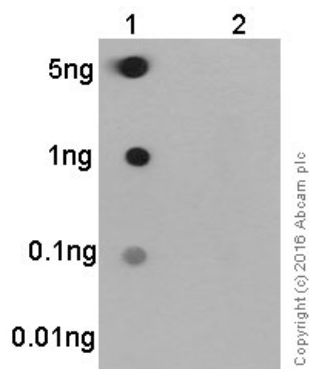
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP labeled Goat anti-Rabbit at 1/2000 dilution

Predicted band size: 85 kDa

Observed band size: 85 kDa

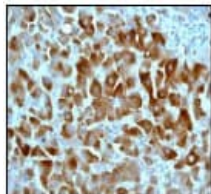


Dot Blot - Anti-Glycogen synthase 1/GYS1 (phospho S641) antibody [EP852Y] (ab81230)

Dot blot analysis of glycogen synthase 1/GYS1 (phospho S641) phospho peptide (Lane 1) and glycogen synthase 1/GYS1 non-phospho peptide (Lane 2) labeling synthase 1 (phospho S641) with ab81230 at a dilution of 1/1000. **ab97051** (Peroxidase conjugated goat anti-rabbit IgG) (H+L) at 1/100 000 was used as the secondary antibody.

Blocking and diluting buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.



Immunohistochemical analysis of Human liver tissue, using 1/100 ab81230.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glycogen synthase 1/GYS1 (phospho S641) antibody [EP852Y] (ab81230)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Glycogen synthase 1/GYS1 (phospho S641) antibody [EP852Y] (ab81230)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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