

Product datasheet

Anti-Glucose Transporter GLUT4 (phospho S488) antibody [EPR930(2)] ab188317

Recombinant RabMAb

★★★★★ 3 Abreviews 5 References 6 Images

Overview

Product name	Anti-Glucose Transporter GLUT4 (phospho S488) antibody [EPR930(2)]
Description	Rabbit monoclonal [EPR930(2)] to Glucose Transporter GLUT4 (phospho S488)
Host species	Rabbit
Tested applications	Suitable for: WB, Dot blot
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human fetal heart, mouse heart, rat heart
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>

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 long term. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR930(2)
Isotype	IgG

Applications

The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab188317 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	★★★★★ (2)	1/1000 - 1/10000. Detects a band of approximately 45 kDa (predicted molecular weight: 55 kDa). We recommend not to boil the samples before loading to get desirable WB results.
Dot blot		Use at an assay dependent concentration.

Target

Function

Insulin-regulated facilitative glucose transporter.

Tissue specificity

Skeletal and cardiac muscles; brown and white fat.

Involvement in disease

Diabetes mellitus, non-insulin-dependent

Sequence similarities

Belongs to the major facilitator superfamily. Sugar transporter (TC 2.A.1.1) family. Glucose transporter subfamily.

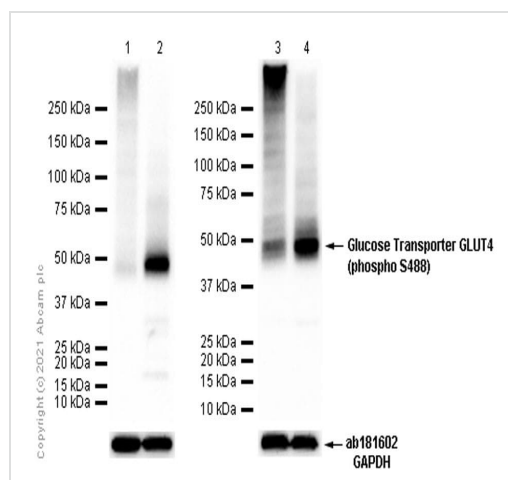
Post-translational modifications

Sumoylated.

Cellular localization

Cell membrane. Endomembrane system. Cytoplasm, perinuclear region. Localizes primarily to the perinuclear region, undergoing continued recycling to the plasma membrane where it is rapidly reinternalized. The dileucine internalization motif is critical for intracellular sequestration.

Images



Western blot - Anti-Glucose Transporter GLUT4 (phospho S488) antibody [EPR930(2)] (ab188317)

All lanes : Anti-Glucose Transporter GLUT4 (phospho S488) antibody [EPR930(2)] (ab188317) at 1/1000 dilution

Lane 1 : Human heart lysate, boiled

Lane 2 : Human heart lysate, unboiled

Lane 3 : Mouse heart lysate, boiled

Lane 4 : Mouse heart lysate, unboiled

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

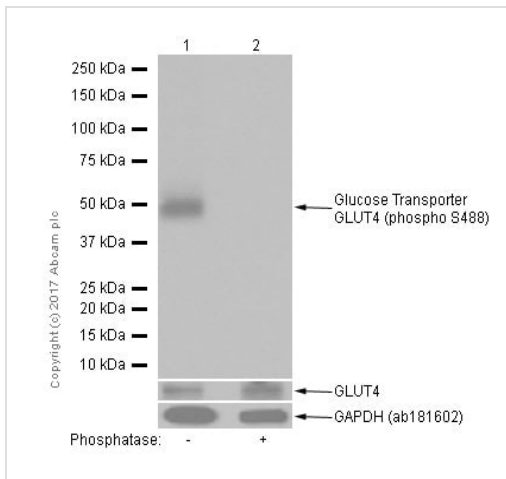
Predicted band size: 55 kDa

Observed band size: 45 kDa

Lanes 1 and 2: 7 seconds exposure

Lanes 3 and 4: 20 seconds exposure

Blocking and diluting buffer: 5% NFDM/TBST



Western blot - Anti-Glucose Transporter GLUT4 (phospho S488) antibody [EPR930(2)] (ab188317)

All lanes : Anti-Glucose Transporter GLUT4 (phospho S488) antibody [EPR930(2)] (ab188317) at 1/1000 dilution

Lane 1 : Human fetal heart whole cell lysates

Lane 2 : Human fetal heart whole cell lysates with Phosphatase

Lysates/proteins at 15 µg per lane.

Secondary

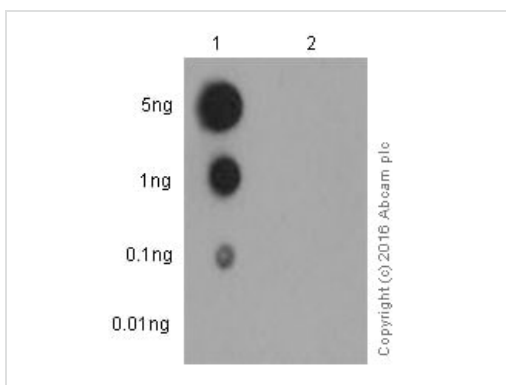
All lanes : Goat Anti-Rabbit IgG, Peroxidase conjugated (DC03L) at 1/20000 dilution

Predicted band size: 55 kDa

Observed band size: 45 kDa

Exposure time: 1 second

Blocking/Diluting buffer and concentration 5% NFDM/TBST

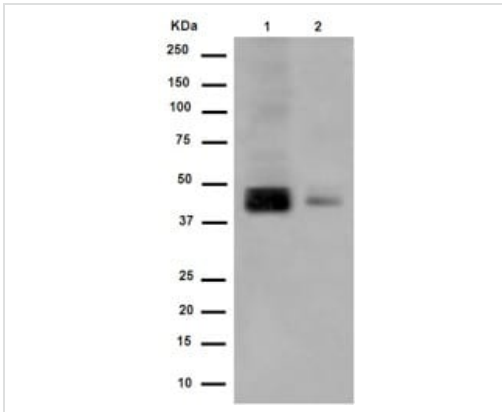


Dot Blot - Anti-Glucose Transporter GLUT4 (phospho S488) antibody [EPR930(2)] (ab188317)

Dot Blot analysis of Lane 1: Glucose Transporter GLUT4 (pS488) phospho peptide and Lane 2: Glucose Transporter GLUT4 non-phospho peptide labeling Glucose Transporter GLUT4 (phospho S488) with ab188317 at 1/1000 dilution.

5% NFDM/TBST was used as the diluting and blocking buffer.

ab97051 Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated was used as the secondary antibody at 1/100000 dilution. Exposure time: 3 minutes.



Western blot - Anti-Glucose Transporter GLUT4 (phospho S488) antibody [EPR930(2)] (ab188317)

All lanes : Anti-Glucose Transporter GLUT4 (phospho S488) antibody [EPR930(2)] (ab188317) at 1/5000 dilution

Lane 1 : Mouse heart

Lane 2 : Rat heart

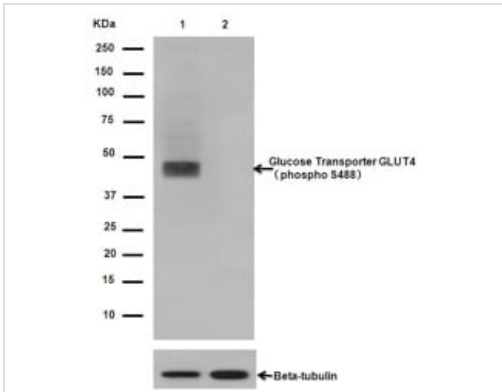
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 55 kDa

Observed band size: 45 kDa



Western blot - Anti-Glucose Transporter GLUT4 (phospho S488) antibody [EPR930(2)] (ab188317)

All lanes : Anti-Glucose Transporter GLUT4 (phospho S488) antibody [EPR930(2)] (ab188317) at 1/20000 dilution

Lane 1 : Untreated human fetal heart

Lane 2 : Lambda phosphorylase treated human fetal heart

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 55 kDa

Observed band size: 45 kDa

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

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

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