## Overview

**Product name**  
Anti-Glucose Transporter GLUT3 antibody

**Description**  
Rabbit polyclonal to Glucose Transporter GLUT3

**Host species**  
Rabbit

**Tested applications**  
Suitable for: WB, IP, IHC-Fr, ELISA, Dot blot, IHC-FrFl, IHC-P, ICC/IF

**Species reactivity**  
Reacts with: Mouse, Rat, Human

**Immunogen**  
Synthetic peptide within Rat Glucose Transporter GLUT3 (C terminal). The exact sequence is proprietary.  
Database link: Q07647  
(Peptide available as ab105625)

**Positive control**  
IHC-P: Human duodenum tissue.

## Properties

**Form**  
Liquid

**Storage instructions**  
Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

**Storage buffer**  
Antibody stabilization buffer. Preservative: 0.02% Sodium Azide

**Purity**  
Immunogen affinity purified

**Purification notes**  
Antigen-sepharose affinity column.

**Clonality**  
Polyclonal

**Isotype**  
IgG

## Applications

Our Abpromise guarantee covers the use of ab41525 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
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</table>

Tissue specificity: Highly expressed in brain. Expressed in many tissues.

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

Cellular localization: Membrane.

Images

Target

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td>⭐⭐⭐⭐⭐</td>
<td>1/8000. Detects a band of approximately 45-47 kDa. Can be blocked with Glucose Transporter GLUT3 peptide (ab105625). Detects a band of approximately 45-47 kDa using 10ug hippocampal plasma membranes as antigen. The samples MUST NOT be boiled before running the gel as highly hydrophobic membrane proteins, like glucose transporters, aggregate severely at high temperatures due to the hydrophobic effect, which increases as a direct function of temperature. If the samples are boiled, much of the transporter will aggregate so severely it doesn't enter the running gel and higher order oligomers will be observed.</td>
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<tr>
<td>IP</td>
<td></td>
<td>Use at an assay dependent concentration. Use at an assay dependent dilution. 2µl ab41525 will immunoprecipitate 80-85% GLUT3 from 250µg rat solublized hippocampal membranes.</td>
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<tr>
<td>IHC-Fr</td>
<td>1/250</td>
<td></td>
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<tr>
<td>ELISA</td>
<td></td>
<td>1/25000.</td>
</tr>
<tr>
<td>Dot blot</td>
<td>1/25000. With solublized hippocampal plasma membranes.</td>
<td></td>
</tr>
<tr>
<td>IHC-FrFl</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>IHC-P</td>
<td></td>
<td>Use a concentration of 4 µg/ml.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use at an assay dependent concentration.</td>
</tr>
</tbody>
</table>
**All lanes**: Anti-Glucose Transporter GLUT3 antibody (ab41525) at 1/2000 dilution

**Lanes 1 & 4 & 7 & 10**: Sal 3 month cortical extract

**Lanes 2 & 5 & 8 & 11**: Glu 3 month cortical extract

**Lanes 3 & 9 & 12**: CB 3 month cortical extract

**Lane 6**: GB 3 month cortical extract

Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes**: Alkaline phosphatase-conjugated goat anti-rabbit IgG at 1/5000 dilution

10% SDS-PAGE gel.

Incubated with the primary antibody for 2 hours at room temperature followed by 3x10 minutes washes in TBST.
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glucose Transporter GLUT3 antibody (ab41525)

**ab41525 staining GLUT3 in human duodenum.**

Left panel: with primary antibody at 4 µg/ml.
Right panel: isotype control.

Sections were stained using an automated system (DAKO Autostainer Plus), at room temperature: sections were rehydrated and antigen retrieved with the Dako 3 in 1 AR buffers EDTA pH 9.0. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 mins. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 min and detected with Dako envision flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.

Immunocytochemistry/ Immunofluorescence - Anti-Glucose Transporter GLUT3 antibody (ab41525)

**ab41525 at a 1/100 dilution staining Glucose Transporter GLUT3 in human PMN cells by Immunocytochemistry/ Immunofluorescence (PFA fixed), incubated for 4 hours at 37°C. Permeabilized using 0.1% Triton X-100 in 2% BSA for 15 minutes. Blocked with 2% BSA for 30 minutes at 22°C. Secondary used undiluted polyclonal goat anti-rabbit IgG (H+L) conjugated to Alexa Fluor® 568 (red). Counterstain DAPI (blue).**

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