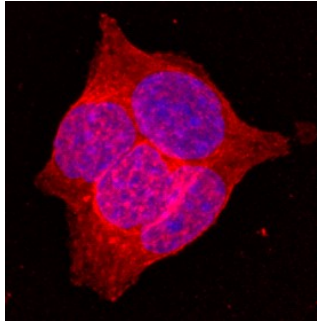
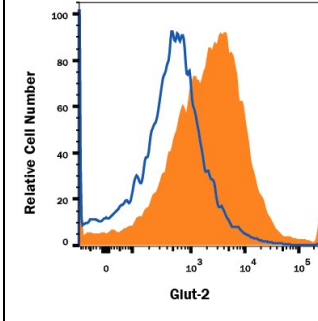


DESCRIPTION	
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Glut2. Recognizes mouse Glut2-transfected NS0 cells but not NS0 control transfectants. It also detects Glut2 on mouse insulinoma βTC-6 cells (2).
<b>Source</b>	Monoclonal Rat IgG <sub>2B</sub> Clone # 205115
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	CHO Chinese hamster ovary cell line transfected with mouse Glut2 Met1-Val523 Accession # P14246
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

APPLICATIONS		
<b>Please Note:</b> Optimal dilutions should be determined by each laboratory for each application. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.		
	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	0.25 μg/10 <sup>6</sup> cells	See Below
<b>Immunocytochemistry</b>	8-25 μg/mL	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA	
<p><b>Immunocytochemistry</b></p>  <p><b>Glut2 in βTC-6 Mouse Cell Line.</b> Glut2 was detected in immersion fixed βTC-6 mouse beta cell insulinoma cell line using Rat Anti-Mouse Glut2 Monoclonal Antibody (Catalog # MAB1440) at 10 μg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to cell surfaces. View our protocol for <a href="#">Fluorescent ICC Staining of Cells on Coverslips</a>.</p>	<p><b>Flow Cytometry</b></p>  <p><b>Detection of Glut2 in βTC-6 Mouse Cell Line by Flow Cytometry.</b> βTC-6 mouse beta cell insulinoma cell line was stained with Rat Anti-Mouse Glut2 Monoclonal Antibody (Catalog # MAB1440, filled histogram) or isotype control antibody (Catalog # MAB0061, open histogram) followed by Phycoerythrin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0102B). View our protocol for <a href="#">Staining Membrane-associated Proteins</a>.</p>

PREPARATION AND STORAGE	
<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

Glut2 belongs to the facilitative glucose transporter protein family that comprises 13 members. It is an integral membrane protein with 12 transmembrane domains. Glut2 is expressed predominantly in liver, intestine, kidney and pancreatic beta-cells. It is a low-affinity glucose transporter that has been suggested to function as a glucose sensor in pancreatic beta-cells and facilitate either glucose uptake or efflux from cells depending on the nutritional state (1).

**References:**

1. Olson, A.L. and J.E. Pessin (1996) *Annu. Rev. Nut.* **16**:235.
2. Poitout, V. *et al.* (1995) *Diabetes* **44**:306.