

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Glut4 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 925951
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Glut4 Met1-Asp509 Accession # P14672
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

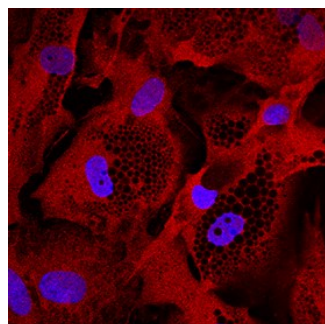
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

DATA

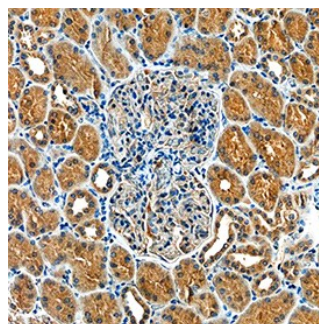
Immunocytochemistry



Glut4 in Human Mesenchymal Stem Cells.

Glut4 was detected in immersion fixed human mesenchymal stem cells differentiated to adipocytes using Mouse Anti-Human Glut4 Monoclonal Antibody (Catalog # MAB8654) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Stem Cells on Coverslips](#).

Immunohistochemistry



Glut4 in Human Kidney.

Glut4 was detected in immersion fixed paraffin-embedded sections of human kidney using Mouse Anti-Human Glut4 Monoclonal Antibody (Catalog # MAB8654) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in tubular epithelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Glut4 (Glucose Transporter Member 4), also known as SLC2A4, is a 509 aa multi-pass type membrane protein and shares 65% aa identity with mouse Glut4. It is an insulin-regulated glucose transporter. Glut4 is most highly expressed in adipose and striated muscle tissues, but has also been reported in multiple other tissues including the nervous system and breast cancer. Insulin stimulated transport of Glut4 has been shown to be impaired in type 2 diabetes patients. Additionally, inhibition of Glut4 may be useful in reducing proliferation of breast cancer cells.