

DESCRIPTION

Target:	GLUT4
Target aliases:	SLC2A4, GLUT-4
Fc isotype:	IgG2a
Membrane proteome specificity:	Monospecific for 6,000 membrane proteins tested
Species reactivity:	Human (Others untested)
Extracellular epitope:	Yes
Fc modifications:	C-terminal Avitag ¹ , disabled Fc- γ receptor binding ²
Source:	Recombinant CHO expression; purified by Protein A chromatography
Formulation:	Endotoxin Free PBS pH 7.4, sterile-filtered
Concentration:	1 mg/ml

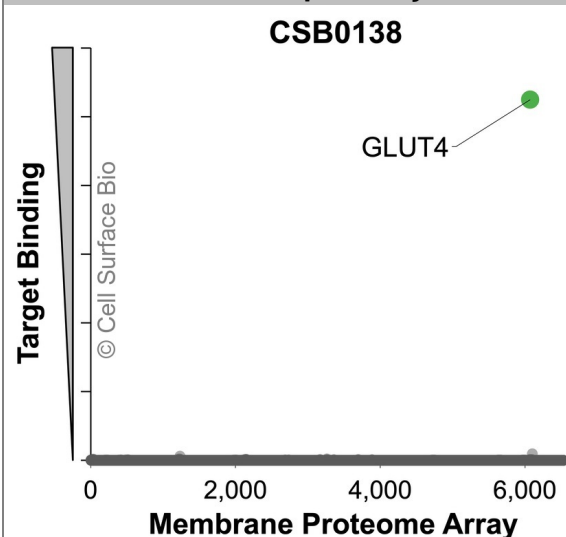
1. A peptide tag that can be biotinylated in vitro using the biotin ligase enzyme (BirA).
2. Mutated Fc- γ receptor binding site to minimize non-specific antibody binding.

GLUT4 TARGET INFORMATION

GLUT4 is a multi-pass membrane protein, insulin-regulated facilitative glucose transporter, and member of solute carrier family 2. GLUT4 is stored in muscle and fat cells, and insulin stimulation causes GLUT4 to move to the cell membrane to transport glucose into the cell. Mutations in the GLUT4 gene are associated with type 2 diabetes. (NCBI Gene: 6517, UniProtKB/Swiss-Prot: P14672) Other names: SLC2A4, GLUT-4

SHIPPING AND STORAGE

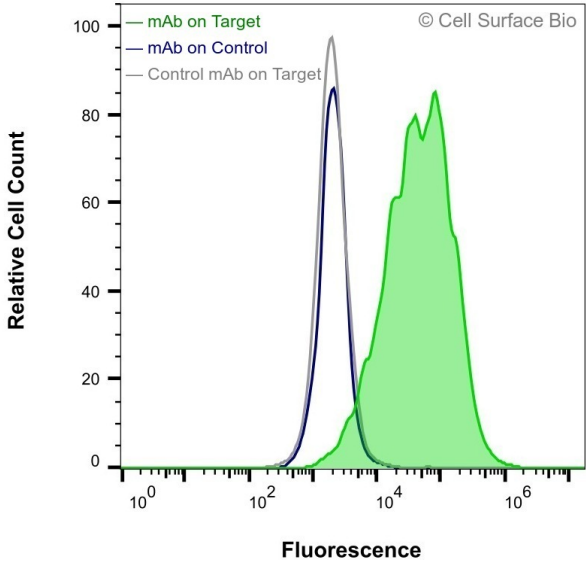
Shipping:	Shipped at ambient temperature. Store at 4°C.
Stability & Storage:	Stable for 12 months from date of receipt when stored at 4°C. Avoid repeated freeze-thaw cycles.

VALIDATION DATA
Membrane Proteome Specificity


The specificity of GLUT4 Monoclonal Antibody (CSB0138) was tested on the Membrane Proteome Array™ and shown to be specific for GLUT4.

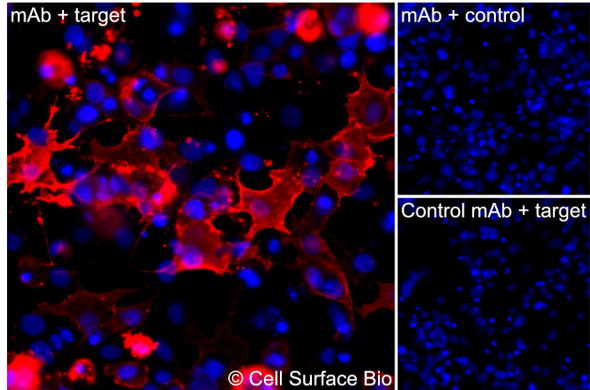
The Membrane Proteome Array™ contains 6,000 different human membrane proteins, each expressed in unfixed human cells to ensure native conformation and post-translational modifications. The Membrane Proteome Array™ represents the industry standard for determining the binding specificity of antibodies and other protein ligands.

Applications	Conditions	Recommended concentration
Flow Cytometry, Extracellular	Live, Unpermeabilized	1 µg/ml



HEK-293F cells transiently transfected with GLUT4 were stained with GLUT4 Monoclonal Antibody (CSB0138) (green) or isotype control antibody (gray), followed by AlexaFluor 647- conjugated anti- IgG secondary antibody. HEK-293F cells transiently transfected with an empty control vector were also stained with GLUT4 Monoclonal Antibody (CSB0138) (blue).

Applications	Conditions	Recommended concentration
Immunofluorescence, Extracellular	Fixed 4% paraformaldehyde	1 µg/ml



(Left) COS-7 cells transiently transfected GLUT4 were stained with GLUT4 Monoclonal Antibody (CSB0138) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) COS-7 cells transiently transfected with an empty control vector stained with GLUT4 Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with GLUT4 and stained with control MAb.

Applications

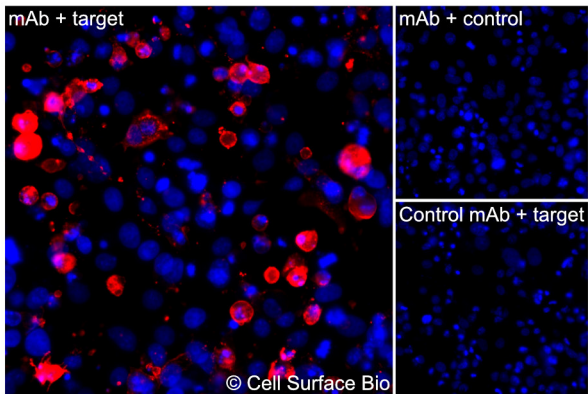
Immunofluorescence, Intracellular

Conditions

Fixed 4% paraformaldehyde,
Permeabilized 0.1% Triton X-100

Recommended concentration

1 µg/ml



(Left) COS-7 cells transiently transfected GLUT4 were permeabilized and stained with GLUT4 Monoclonal Antibody (CSB0138) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) COS-7 cells transiently transfected with an empty control vector stained with GLUT4 Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with {{target}} and stained with control MAb.