Data Sheet (Cat.No.TMPH-03373)

TargetMol

SLC2A1 Protein, Rat, Recombinant (His & Myc)

General Information

Synonyms:	facilitated glucose transporter member 1;Glucose transporter type 1, erythrocyte/brain (GLUT-1);Slc2a1;Glut1;Solute carrier family 2, facilitated glucose transporter member 1
Protein Construction:	207-271 aa
Species:	Rat
Expression Host:	E. coli
Accession:	P11167
Molecular Weight:	15.2 kDa (predicted)
AA Sequence:	CPESPRFLLINRNEENRAKSVLKKLRGTADVTRDLQEMKEEGRQMMREKKVTILELFRSPAYRQP

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90% as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose, pH 8.0.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in sterile deionized water. The product concentration should not be less than 100 μg/mL. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Facilitative glucose transporter, which is responsible for constitutive or basal glucose uptake. Has a very broad substrate specificity; can transport a wide range of aldoses including both pentoses and hexoses. Most important energy carrier of the brain: present at the blood-brain barrier and assures the energy-independent, facilitative

transport of glucose into the brain. In association with BSG and NXNL1, promotes retinal cone survival by increasing glucose uptake into photoreceptors.

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