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Recombinant Human GLUT6/SLC2A6 protein (GST, His Tag)

Catalog Number: PDEH100964

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Species Human

Source E.coli-derived Human GLUT6 protein Asn216-Thr289, with an N-terminal GST & C-

terminal His

Calculated MW33.0 kDaObserved MW35 kDaAccessionQ9UGQ3-1

Bio-activity Not validated for activity

Properties

Purity > 95% as determined by reducing SDS-PAGE.

Endotoxin < 10 EU/mg of the protein as determined by the LAL method

Storage Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80

°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

ShippingThis product is provided as lyophilized powder which is shipped with ice packs.FormulationLyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5%

Mannitol.

Reconstitution It is recommended that sterile water be added to the vial to prepare a stock solution of

0.5 mg/mL. Concentration is measured by UV-Vis.

Background

GLUT6 as a functionally uncharacterized transporter that putatively works in inflammatory responses. Inflammatory stimuli increase GLUT6 expression level, although GLUT6-knockout mice exhibit a subtle phenotype to lipopolysaccharide administration. Metabolomics and in vitro analyses show that GLUT6 functions as a glycolysis modulator in inflammatory macrophages. GLUT6 does not mediate glucose uptake and is localized on lysosomal membranes. We conclude that GLUT6 is a lysosomal transporter that is regulated by inflammatory stimuli and modulates inflammatory responses by affecting the metabolic shift in macrophages.