

Resource Summary Report

Generated by [dkNET](#) on Aug 26, 2026

pcDNA3.1 FLII12Pglu-700uDelta6

RRID:Addgene_17866

Type: Plasmid

Proper Citation

RRID:Addgene_17866

Plasmid Information

URL: <http://www.addgene.org/17866>

Proper Citation: RRID:Addgene_17866

Insert Name: FLII12Pglu-700uDelta6

Organism: E. coli

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:18177733](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:5409; Vector Backbone:pcDNA3.1; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Plasmid Name: pcDNA3.1 FLII12Pglu-700uDelta6

Relevant Mutation: 700uDelta6, ECFP insert in mglB

Record Creation Time: 20220422T222029+0000

Record Last Update: 20260826T041222+0000

Ratings and Alerts

No rating or validation information has been found for pcDNA3.1 FLII12Pglu-700uDelta6.

No alerts have been found for pcDNA3.1 FLII12Pglu-700uDelta6.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 33 mentions in open access literature.

Listed below are recent publications. The full list is available at [dkNET](#) .

Nguyen NTB, et al. (2025) Lactate controls cancer stemness and plasticity through epigenetic regulation. *Cell metabolism*, 37(4), 903.

Aburto C, et al. (2025) Acute stimulation of glucose metabolism by H₂O₂ sustains the NADPH steady-state under oxidative stress. *Redox biology*, 85, 103740.

Pilic J, et al. (2024) Hexokinase 1 forms rings that regulate mitochondrial fission during energy stress. *Molecular cell*, 84(14), 2732.

Cuervo-Zanatta D, et al. (2023) Dietary Fiber Modulates the Release of Gut Bacterial Products Preventing Cognitive Decline in an Alzheimer's Mouse Model. *Cellular and molecular neurobiology*, 43(4), 1595.

Socodato R, et al. (2023) RhoA balances microglial reactivity and survival during neuroinflammation. *Cell death & disease*, 14(10), 690.

Wollman AJM, et al. (2022) Large scale, single-cell FRET-based glucose uptake measurements within heterogeneous populations. *iScience*, 25(4), 104023.

Yang J, et al. (2022) Longitudinal FRET Imaging of Glucose and Lactate Dynamics and Response to Therapy in Breast Cancer Cells. *Molecular imaging and biology*, 24(1), 144.

Deck M, et al. (2022) Physiology of PNS axons relies on glycolytic metabolism in myelinating Schwann cells. *PloS one*, 17(10), e0272097.

Horvat A, et al. (2021) Ca²⁺ as the prime trigger of aerobic glycolysis in astrocytes. *Cell calcium*, 95, 102368.

Wu D, et al. (2021) Single-cell metabolic imaging reveals a SLC2A3-dependent glycolytic burst in motile endothelial cells. *Nature metabolism*, 3(5), 714.

Kondo H, et al. (2021) Single-cell resolved imaging reveals intra-tumor heterogeneity in glycolysis, transitions between metabolic states, and their regulatory mechanisms. *Cell reports*, 34(7), 108750.

Fernández-Moncada I, et al. (2021) Bidirectional astrocytic GLUT1 activation by elevated extracellular K⁺. *Glia*, 69(4), 1012.

Miyamoto T, et al. (2019) Neuronal Gluconeogenesis Regulates Systemic Glucose Homeostasis in *Drosophila melanogaster*. *Current biology : CB*, 29(8), 1263.

Bearham J, et al. (2019) Effective glucose metabolism maintains low intracellular glucose in airway epithelial cells after exposure to hyperglycemia. *American journal of physiology. Cell physiology*, 317(5), C983.

Baeza-Lehnert F, et al. (2019) Non-Canonical Control of Neuronal Energy Status by the Na⁺ Pump. *Cell metabolism*, 29(3), 668.

Volkenhoff A, et al. (2018) Live imaging using a FRET glucose sensor reveals glucose delivery to all cell types in the *Drosophila* brain. *Journal of insect physiology*, 106(Pt 1), 55.

Lucantoni F, et al. (2018) Metabolic Targeting of Breast Cancer Cells With the 2-Deoxy-D-Glucose and the Mitochondrial Bioenergetics Inhibitor MDIVI-1. *Frontiers in cell and developmental biology*, 6, 113.

Depaoli MR, et al. (2018) Real-Time Imaging of Mitochondrial ATP Dynamics Reveals the Metabolic Setting of Single Cells. *Cell reports*, 25(2), 501.

Vardjan N, et al. (2018) Enhancement of Astroglial Aerobic Glycolysis by Extracellular Lactate-Mediated Increase in cAMP. *Frontiers in molecular neuroscience*, 11, 148.

Siska EK, et al. (2017) Generation of an immortalized mesenchymal stem cell line producing a secreted biosensor protein for glucose monitoring. *PloS one*, 12(9), e0185498.