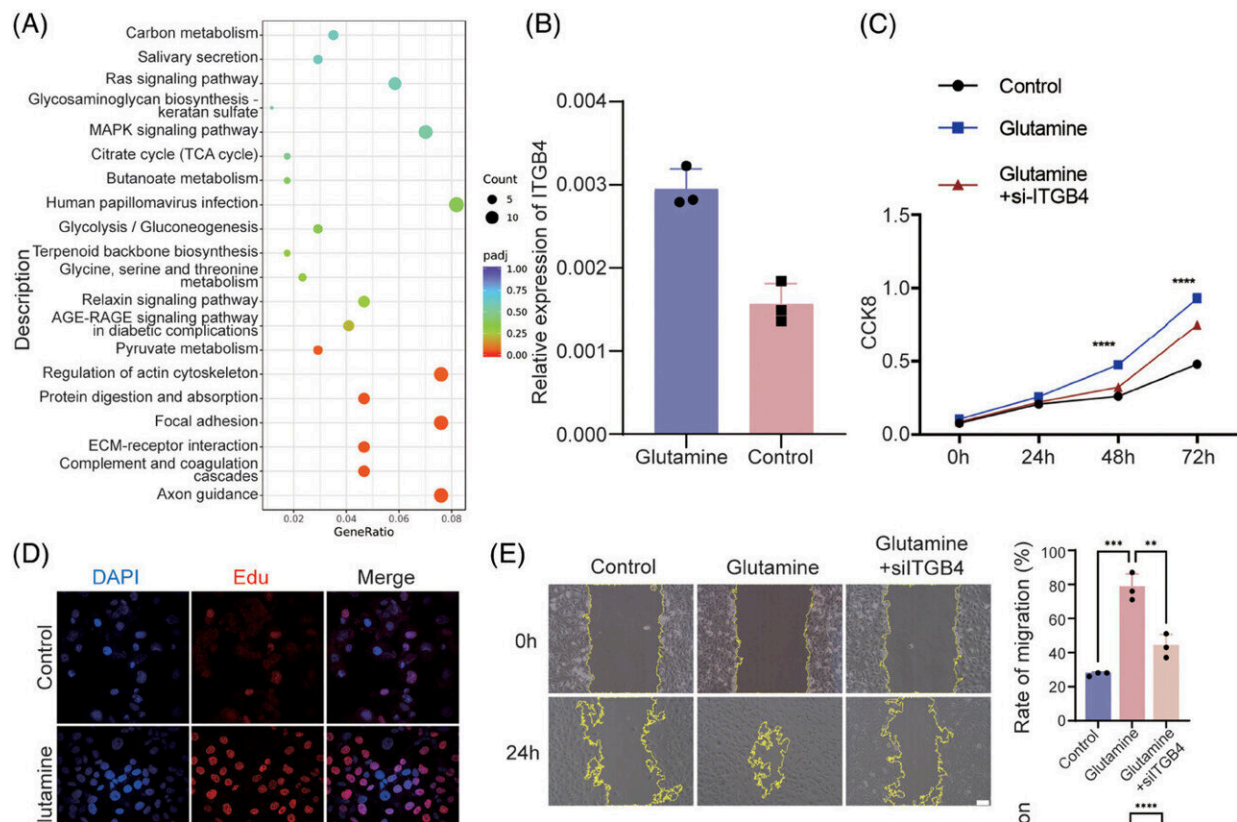


# Elevated glutamine triggers stroke risk in moyamoya disease via endothelial-to-mesenchymal transition, finds study

April 18 2024



Glutamine promotes proliferation, migration, and EndMT through ITGB4 in

HBMECs. (A) Kyoto Encyclopedia of Genes and Genomes enrichment analysis of HBMECs treated with glutamine. (B) RT-qPCR analysis of ITGB4 expression in HBMECs treated with glutamine. (C) Proliferation ability of HBMECs subjected to glutamine treatment and ITGB4 knockdown assessed by CCK8 assay. (D) Representative images of EdU assays in HBMECs subjected to glutamine treatment and ITGB4 knockdown. Each image represents three replicates. Scale bar, 10  $\mu\text{m}$ . (E) Representative images (left) and histogram (right) of HBMEC migration, as determined via wound healing assays. Each image represents three replicates. Scale bar in white, 100  $\mu\text{m}$ . (F) Representative images (left) and histogram (right) of the migration ability of HBMECs, as determined via transwell assays. Each image represents three replicates. Scale bar in black, 25  $\mu\text{m}$ . (G) Western blot analysis (left) and the histograms (right) of Vimentin,  $\alpha\text{SMA}$ , VE-cadherin, CD31, and ITGB4 in HBMECs subjected to different treatments.  $**p$

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