

Adenovirus-mediated suppression of hypothalamic glucokinase affects feeding behavior

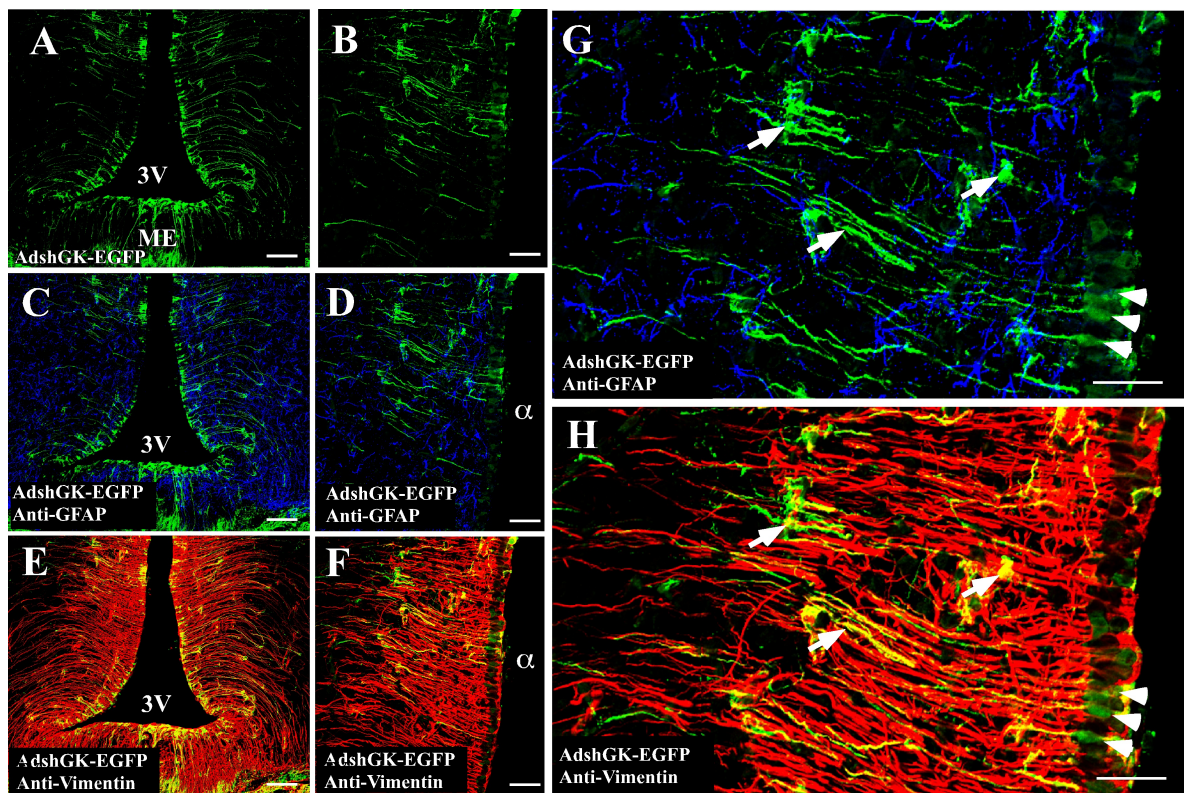
Romina María Uranga^{1,3*}, Carola Millán^{1,4*}, María José Barahona¹, Antonia Recabal¹, Magdiel Salgado¹, Patricio Ordenes¹, Roberto Elizondo-Vega¹, Fernando Sepúlveda¹, Elena Uribe² and María de los Ángeles García-Robles^{1&}

1 Departamento de Biología Celular, 2 Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias Biológicas, Universidad de Concepción

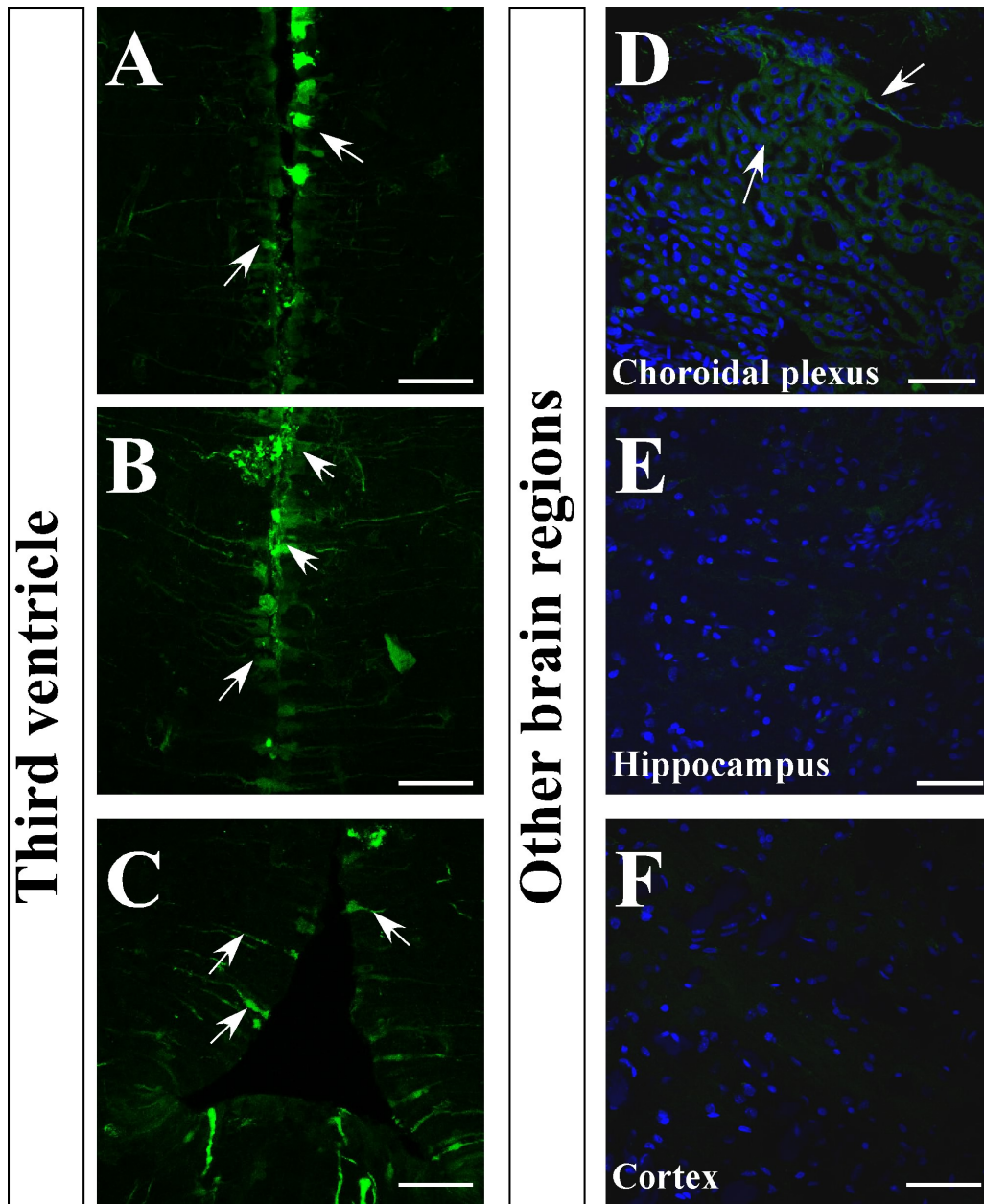
3Instituto de Investigaciones Bioquímicas de Bahía Blanca, Universidad Nacional del Sur, y Consejo Nacional de Investigaciones Científicas y Técnicas, Bahía Blanca, Argentina

4Facultad de Artes Liberales, Facultad de Ingeniería y Ciencias, Universidad Adolfo Ibáñez, Viña del Mar Chile

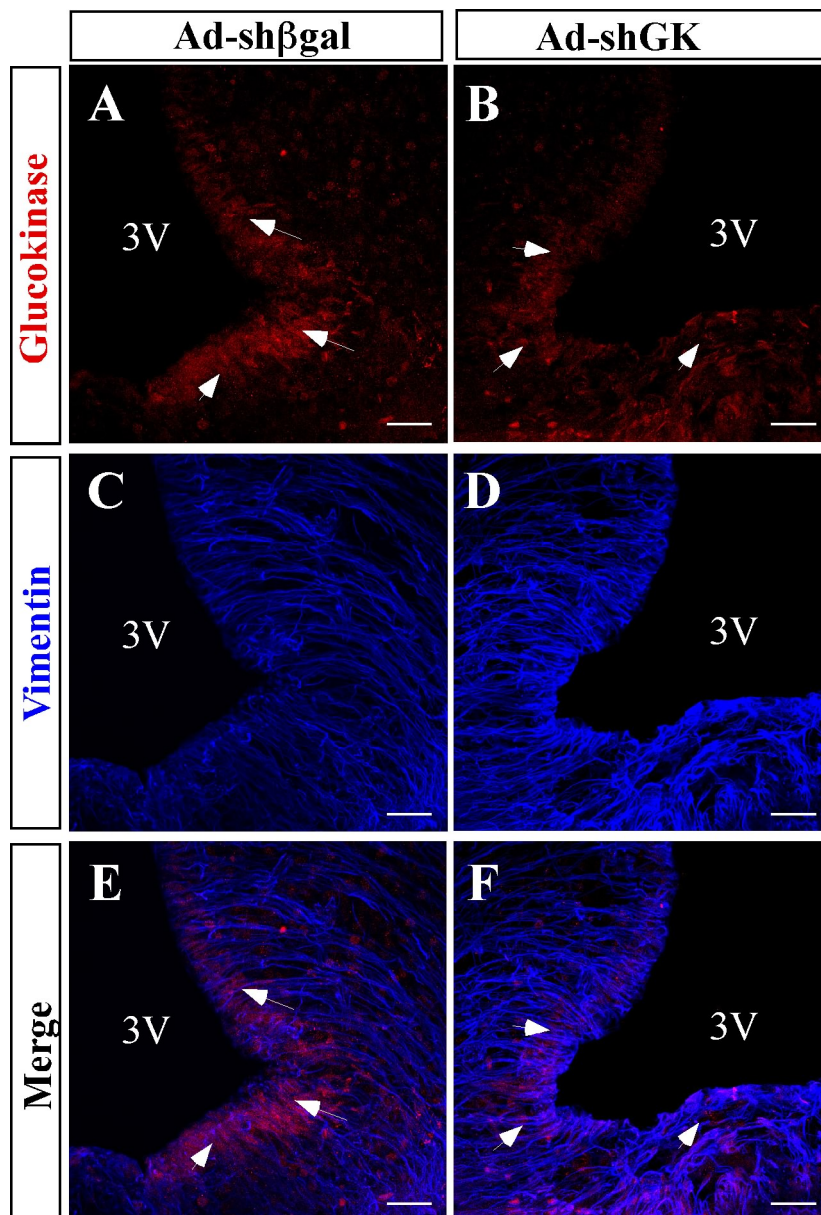
& Address correspondence and reprint requests to M A. García-Robles, Departamento de Biología Celular, Facultad de Ciencias Biológicas, Universidad de Concepción, Casilla 160-C, Concepción, Chile



Supplementary Figure 1. Hypothalamic GFAP expression after Ad-shGK-EGFP injection into the 3V. Confocal microscopy analysis of vimentin (red), GFAP (blue) and EGFP (green) associated fluorescence **A-B**, EGFP is detected in apical membranes and long cellular processes in the basal hypothalamus. **C-D**, showing astrocyte distribution and the absence of EGFP colocalization. **E-F**, Vimentin showing tanycyte distribution and colocalization with the adenovirus. **G-H**, High magnification images showing astrocytes negative for EGFP (G) and tanycytes positive for EGFP (H). Scale bar A-F: 50 μ m; G-H: 25 μ m.



Supplementary Figure 2. Transduction of Ad-shGK-EGFP in the third ventricle and other brain regions. **A-C**, EGFP expression in the dorsal (A), medium (B), and basal regions of the 3V (C). **D-F**, EGFP expression in choroidal plexus (D) showing low intensity, hippocampus (E) and cerebral cortex (F); EGFP was not detected in the last two areas. Scale bars: 50 μ m



Supplementary Figure 3. GK expression at 48 h after Ad-shGK-EGFP injection into the third ventricle. Frontal sections from the hypothalamus at 48 h after i.c.v. injection of Ad-sh β Gal (A,C and E) and Ad-shGK (B,D and F). Immunoreactivity for GK is in red and nuclear marker, TOPRO 3, is in blue. Scale bars: 50 μ m.