Expression of the Endoplasmic Reticulum Chaperone GRP94 Gene in Ischemic Gerbil Brain

Seung-Whan Kim, Soojung Park, Kwan-Hee You, and O-Yu Kwon*

Department of Emergency Medicine, Chungnam National University Hospital, Taejon 301–721, Korea
Department of Anatomy, College of Medicine, Chungnam National University, Taejon 301–747, Korea
Department of Biology, College of Natural Sciences, Chungnam National University, Taejon 305–764, Korea. Present address: Department of Anatomy, College of Medicine, Chungnam National University, Taejon 301-747, Korea. Fax: 82-42-586-4800.
E-mail: oykwon@cnu.ac.kr

* Author for correspondence and reprint requests

Z. Naturforsch. 58c, 736–739 (2003); received March 21, 2003

GRP94 (glucose regulated protein 94) gene expression in the ischemic-hippocampus of gerbils, which was induced by a temporary occlusion of the bilateral common carotid arteries (CCAs), was tested by Northern blot analysis. The maximum GRP94 gene expression level was detected at the occipital lobe 10 min after the induction of ischemia. In the hippocampus, GRP94 gene expression reached a maximum 15 min after inducing ischemia. Following reperfusion, the maximum expression level was shown at 12 h and continuing thereafter.

Key words: Glucose-Regulated Protein 94 (GRP94), Common Carotid Artery (CCA), Ischemia