Palladin Institute of Biochemistry of NAS of Ukraine
Ukrainian Biochemical Society
Council of Young Scientists of the Division of Biochemistry,
Physiology and Molecular Biology National Academy of Sciences of Ukraine

JOINT MEETING OF THE 25th ANNUAL CONFERENCE "MODERN ASPECTS OF BIOCHEMISTRY AND BIOTECHNOLOGY" & 2nd CONFERENCE FOR YOUNG SCIENTISTS OF THE DIVISION OF BIOCHEMISTRY, PHYSIOLOGY AND MOLECULAR BIOLOGY NATIONAL ACADEMY OF SCIENCES OF UKRAINE

6-9 June 2017, Kyiv, Ukraine

Sections:

1. Biomaterials
2. Bioactive Compounds
3. Cancerogenesis
4. Gene Expression
5. Metabolites and Correction of Metabolic Processes
6. Proteomics and Protein Functions
7. Molecular Basis of Physiological Functions

PROTEOMICS AND PROTEIN FUNCTIONS

FEATURES OF DIFFERENTIATED GLIOMA C6 CELL CULTURE

T. BALASHEVICH, V. NIKANDROV

Institute of Physiology, of NAS of Belarus, Minsk;
e-mail: tbalashevich@bk.ru

The management of neoplastic cell cultures of neuroectodermal origin, as a rule, is carried out in accordance with the clear protocols attached by the cell culture banks when acquiring cell lines from them. These requirements allow accurate reproduction of the results of studies on these cell lines, rapid production of cellular responses to the agent under study, while maintaining the standard culture conditions. However, in some cases, the introduction of changes in cultivation conditions makes it possible to achieve great success in *in vitro* studies in view of a more vivid extrapolation of phenomena to the living organism of mammals.

So the cell line of glioma C6 of neuroectodermal origin is widely used as a model of cellular responses of fibroblast and astrocyte-like cells. The general culture conditions for conducting the confluent culture of this line are described as the DMEM or RPMI medium containing 10% fetal bovine serum (FBS). However, given that this cell line consists of four subtypes of cells (astrocyte-, fibroblast-, oligodendrocyte-like, and epithelioid cells) that can be differentiated with specific antibodies to the glial acid fibrillar protein (GFAP) and galactocerebroside.

Then in some cases it is advisable to apply the conditions of the C6 line in which the majority of cells will differentiate according to the type of astrocyte-like cells.