

THE IMMUNOHISTOCHEMICAL PROCEDURE FOR THE DETECTION OF MOUSE MONOCLONAL C-MYC EXPRESSION

J. Matic, M. Ulamec, B. Krušlin

Ljudevit Jurak University Department of Pathology, Sestre milosrdnice University Hospital, Zagreb, Croatia

c-Myc protein is a transcription factor encoded by the c-Myc gene located on human chromosome 8q24. c-Myc plays an important role in many physiological processes. Chromosomal translocations or amplifications can induce c-Myc gene alterations. Several studies have shown that c-Myc gene alterations play an essential role in the development of tumor neovascularization. Therefore, c-Myc is an object of numerous studies dealing with novel therapeutic approaches and/or prognostic factors in cancer treatment. The antibody to c-Myc is currently in use only for scientific purposes and there are no standardized recommendations for the detection of c-Myc. We present our experiences in this field. The study was done on one hundred and fifty paraffin blocks with prostate carcinoma from the Ljudevit Jurak Department of Pathology archive. Specimens were fixed in 10% buff-

ered formaldehyde, embedded in paraffin and cut at 3 μ m for immunostaining in Dako Autostainer. PAP method was used with LSAB/HRP universal-Dako visualization and en vision FLEX. Pretreatment of samples was done within PT link. Optimal dilution was 1:150. c-Myc antibodies from Abcam (9E10) and Santa Cruz (9E10) were used. We employed several different techniques in the preparation of c-Myc immunostained sections, according to protocols from various manufacturers. At the end we chose a protocol that was sensitive enough for the detection of c-Myc and its evaluation. c-Myc antibody is most frequently used for scientific purposes and there is a need for standardization of c-Myc detection procedure in routine practice. Experiences from different laboratories are valuable because they allow comparison and revision of the procedure.