

EGF EFFECTS ON THE EXPRESSION OF *SPARC* AND *MGC11242*  
TRANSCRIPTS IN HUMAN MAMMARY CELL LINES EXPRESSING  
DIFFERENT LEVELS OF ERBB2

Gimenes, K.P.<sup>1</sup>; Nagai, M.A.<sup>1</sup>

<sup>1</sup>Disciplina de Oncologia, Departamento de Radiologia, Faculdade de Medicina,  
Universidade de São Paulo, São Paulo, Brasil.

The erbB-2, which activates important cell signaling pathways such as MAPK and PI3K, is amplified and over expressed in 15-30% of breast cancers. In a previous study we identified the *SPARC* and *MGC11242* genes as down and up regulated, respectively, in mammary cell lines with erbB-2 over expression. In the present study we investigated the effects of EGF on the *SPARC* and *MGC11242* transcripts regulation in three cell lines expressing different levels of ErbB-2. The Hb4a cells, which express basal levels of erbB-2, showed time-dependent *SPARC* decreased expression upon EGF treatment. The C5.2 cells, which express high levels of erbB-2, displayed 2-fold reduction in *SPARC* expression after EGF exposure for 2 h. The expression of *SPARC* was undetected in breast carcinoma cell line SKBR-3 that over express erbB-2. The Hb4a and C5.2 cell lines showed 7 and 5-fold decrease, respectively, in *MGC11242* expression after 24 hours of EGF treatment. However, the EGF treatment did not promote significant alteration in the *MGC11242* expression in SKBR-3 cells. Our results indicate that *SPARC* and *MGC11242* transcripts are modulated by EGF, however further studies are necessary to determine whether this modulation is mediated by erbB-2.  
Supported by FAPESP.