

Abstract Submitted  
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**The effect of the suspension cells in plasma gene transfection method**<sup>1</sup> YUKI ISOZAKI, KOKI NAKANO, YOSHIHISA IKEDA, HIDEKI MOTOMURA, Department of Electrical and Electronic Engineering, Ehime Univ, YUGO KIDO, Pearl Kogyo Co.Ltd, SUSUMU SATOH, Y's Corporation, KUNIHIDE TACHIBANA, Department of Electrical and Electronic Engineering, Osaka Electro-Communication Univ, MASAFUMI JINNO, Department of Electrical and Electronic Engineering, Ehime Univ — Plasma gene transfection method is a unique technique for introducing nucleic acids into cells by using plasma irradiation. In our previous works, plasma gene transfection method was performed for the adherent cells, e.g. COS-7 cells, and the influence of plasma on gene transfection has been investigated. As a next step for plasma medicine, transfection to much more various kinds of target cells is required. In this study, the authors attempted gene transfection to two kinds of suspension and four kinds of adherent cells. Although the transfection ratios to the suspension cells were low, transfection to all the kinds of cells were validated. To upregulate the transfection ratio for suspension cells, the authors are validating related factors by plasma irradiation.

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