

Viability improvement of hybridoma cell for producing large quantity of monoclonal antibody

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Abstract

Hybridoma cell is very important for producing monoclonal antibody(Mab). Producing large quantity of monoclonal antibody is economically valuable. On this experiment, we used one of hybridoma cell line, 5F12 AD3, and treated various antibiotics such as geneticin(G418), ciprofloxacin and minocycline to improve cell viability and we expect that improving cell viability brings higher concentrations of monoclonal antibody. The optimum concentration of each antibiotics for improving cell viability were 10ug/ml for G418, 1ug/ml or 10ug/ml for ciprofloxacin, and 1ug/ml for minocycline. The results are similar to same experiment of various oxygen concentration conditions. We also made an experiment of inhibition effect of used antibiotics of producing protein by several experiments. And we knew that there was no much inhibition. Therefore, we expect that this experiment bring a economically success for producing large quantity of monoclonal antibody.

References

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