



Evaluation of the Progression of Hybridoma Technology

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Abstract:

Many recombinant technologies have been used to produce antibodies in a number of laboratories. Since 1975, hybridoma technology has become the most widely used technique to generate antigen specific monoclonal antibodies (MAbs). Here, we review the techniques, applications, benefits and challenges of hybridoma-based generation of MAbs. In this technique hybrid cells are obtained by fusing B cells, with formerly prepared myeloma cells. The fused cells are thus called hybridoma cells (hybridomas). Hybridomas, which are able to secrete specific antibodies, directed to a target antigen, are selected and sub-cloned to a large medium for mass production. A large quantity of MAbs generated through hybridoma technology has been extensively employed to detect the target molecules in research and clinical laboratories. Additionally, MAbs have long been used for prevention and treatment of a variety of diseases. Although, hybridoma technology is capable of producing a large quantity of desired MAbs, it still has its short-comings.

Biography:

Achim Cchitvsanzwhoh Satheka, is Life Scientist whose areas of interests include: Genetic Engineering, Gene Editing, Cancer Biology etc. He is the first scientist to delete a large fragment of gene sequence in Mice (65Kb) using CRISPR/Cas9 gene editing technology in 2014. Has worked at Transgenic Research Institute in China. He is currently working as a Lecturer at Gaborone University. He is the Deputy Head of Health Sciences Department at Gaborone university College in Botswana, Africa.



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