

Updates on the production of therapeutic antibodies using human hybridoma technique

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Therapeutic antibodies are implicated into the very promising and fast growing area of pharmaceuticals. Human hybridoma technology, allowing generation of natural human antibodies in a native form, seems to be the most direct way that require no additional modifications for production of therapeutic antibodies. However, technical difficulties in human hybridoma creation discovered in the 80s of the last century have switched the mainstream therapeutic antibody development into new directions like display and transgenic mice techniques. These approaches have provided remarkable achievements in antibody engineering within last 15 years, but also revealed other limitations. Thus, it is time to turn back to forgotten human hybridoma technology. In this review, we describe new advances in all components of human hybridoma technology and discuss challenges in generating novel therapeutic mABs based on hybridoma technologies. © 2016 Bentham Science Publishers.

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Mice, Transgenic